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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 1

FEBRUARY, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE ONE DOLLAR PER YEAR.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

Parties remitting money to this office by post are requested to do so by Postoffice Order or Registered Letter, addressed to the INLAND PUBLISHING COMPANY, Publishers INLAND ARCHITECT AND BUILDER, 17 Tribune Building, Chicago.

Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

UNLIKE many journalistic infants, THE INLAND ARCHITECT AND BUILDER makes its advent unheralded. The idea of its publication, however, was not suddenly conceived nor hastily matured. A careful canvass convinced its projectors that a periodical devoted to the interests of Western architects, builders, house decorators and those engaged in kindred arts, would be cordially welcomed and receive substantial support.

We shall spare no endeavor to furnish valuable news and information to those in whose interests we publish and to make our journal attractive in typographical appearance. If those interested, professionally or incidentally, in the planning, building or decorating of homes, or commercial or public structures, find this journal entertaining and a help to them, the aim of its projectors will be attained.

IN our next issue we will commence a series of papers entitled, "History of Chicago Architecture." These will be compiled from reliable information carefully gathered, or from the pens of architects who have been intimately associated with the building interests of Chicago from her earliest history to the present time, the whole intended to be a practical dissertation upon Chicago architecture from her first habitation.

We shall also commence with our next number the publication of a valuable course of lectures on architecture, by W. L. B. Jenney, architect, of this city. These lectures are now being delivered by Prof. Jenney before the students of the Chicago University.

LETTERS containing the latest building news and gossip from St. Louis, St. Paul, Detroit, Cincinnati and other points will be a leading feature of this journal, and correspondence is requested from architects and builders throughout the country. Matters of news and valuable facts will be promptly published and proper credit given.

MANY criticisms are made upon the mode of construction followed by our architects in the erection of "French Flats," or, as they are more elegantly termed, apartment houses, the claim being that they are not like the French original. The architects of the present day, particularly those of Chicago, are men of practical ideas, and are eclectic in their treatment of all architectural work. They recognize that while the general wants of the people for comfortable homes are the same, that the conditions of living are different, and they construct the house to suit the occupant. Of course, any departure from a tried method is more or less experimental, but an intelligent selection of the best features of an old system joined with the demand for something different and better, cannot be very far from an improvement in its results. It is plain to every practical housekeeper that while a true French Flat or a Queen Anne house would be beautiful or practical in theory, there are not many Americans who would enjoy living in either in preference to a house built upon improved methods, with "all the modern conveniences." In buildings, as in a great many other things, it may be well to model after, but not to copy the past.

ARCHITECTS who have been doing a great deal of flat and apartment-house building the past few years say that the demand is increasing, but that as a matter of speculation property-owners could not better invest their money than by building what are termed cheap dwelling houses. Houses costing from $3,000 to $8,000 could be rented as fast as built, at a distance of two or three miles from the center of business, and a very fair interest on their money permanently secured. This would refer particularly to the West Side, on the line of Van Buren street, east of Ashland avenue, and also east of Western avenue, and on the western section of the 12th ward, where some of the best residence property is lying vacant. It is certainly true that the supply of cheap and comfortable homes for the middle class of people is not beginning to meet the demand, and Chicago enterprise should remedy the matter by building such houses, being assured of a safe and permanent rental, and a good percentage on the investment.

A STATEMENT lately appeared in the Chicago *Tribune* that Mr. James Brooks, the owner of the lot corner of Monroe and Dearborn streets, would erect a six or seven story building on the 100 feet south of the portion 90x131 feet, leased to a company similar to the National Safety Deposit Company. There are two errors in this: first, the name of the gentleman is not James, but Sheppard Brooks, a wealthy Bostonian, and secondly, he has no intention of building this summer.

DURING the past year, the hardwood business of Chicago maintained a volume somewhat in excess of previous years, its aggregate reaching, from the best obtainable data, not far from 300,000,000 feet. This is a splendid showing, and places Chicago in the front rank of the hardwood markets.

THE series of holocausts of late, all over the world, seem to have inspired an unlimitable supply of suggestions *a la prevention;* but the demand of the hour is action. The most wonderful production in the "mind's eye," the most brilliant conception, the most realistic dream, count for nothing, except as they contribute to action. When some vast hotel or other building, is suddenly wrapped in flames and crumbles to the earth, and imagination rings in our ears the despairing shrieks and heart-rending cries of a hundred hapless victims; then the whole world wakes up to the fact that something ought to be done, and on every side we hear the same old songs: "Cannot something be done?" "Is there no balm in Gilead?" "Must this series of horrible tragedies go on forever?" "Where are the architects and builders?" "What are they doing? Can't they invent something—advance some ideas?"

Yes, they can and do. There are billions of their bright ideas floating round loose, waiting for somebody to put clothes enough on them to keep them from freezing. There are fire-escapes, and there are architects and builders waiting anxiously for the words, "Put them on my buildings." For what is the owner waiting? "Well—he is waiting to *decide.*" "Haste makes waste;" besides, he's got a patent iron-clad, copper-bottomed compact with King Fire to let his buildings alone. Others' may burn up or down, his won't. While he is deciding, the newspapers get through shouting, and he decides to wait until the next horror. Let us have a little *sensible* legislation on the subject. If an owner will not place fire-escapes on his buildings, put them on for him and send him the bill. It is not the adequate means we lack, but the enforcement of their use.

ORNAMENTAL plaster is a favorite decorative material for almost all classes of interiors. By the popular method, and that which insures the best results and greatest permanency, the design is first sketched, then copied entire from the sketch upon a block of prepared plaster, and carved in relief. The carving of the entire drawing upon one block is to insure geometrical accuracy. The carving is then cut into sections, from which the plaster is molded. To prevent cracking of the ornamentation after it is placed, from the springing or shrinkage of the timbers of the wall or ceiling, the plaster cast is laid upon open meshed canvas, which secures sufficient expansion or contraction for the plaster surface. Besides the skillful drawing of the design the work of the carver of the mold is of equal importance, and is seconded by the skillful manipulation of the plaster cast.

THE art of making Vasa Murrhina, the famous glass work of Egyptian or Tyrian origin, which was lost for 2,000 years, has at last been discovered, and this glass is now being made and introduced as centers for decoration and for panels, tiles, etc. In the restoration of this lost art we have a decorating material, which from its adaptability and beauty will be much sought for. This revival, which commenced at Murana, has spread to this country, and we understand that a factory for the manufacture of this glass is to be started in Chicago,

TERRA cotta lumber is a newly invented material for building purposes. It is a kind of brick so soft that it can be sawed and worked with edge tools as readily as wood, and nails can be driven into it and will hold as well as in wood. The makers claim that it has a tenacity and resistance to strains greater than oak timber. It is manufactured from a species of clay very abundant in New Jersey and elsewhere. It is as cheap as brick, and has many advantages as a fire-proof building material.

A Reform in Suburban Dwellings.

BY W. L. B. JENNEY, ARCHITECT.

THERE are certain great principles governing all true styles of architecture that ever existed or that can exist and that are independent of time, fashion and nationality.

1. *Convenience of arrangement*, including proper sanitary conditions, the satisfying of every need of the members of the family, pleasing prospects from the rooms most in use during the day and cool exposure for summer sleeping-rooms, verandas sheltered from the sun, and much else that readily suggests itself to everyone.

Then the servants apartments should be looked after; they should be able to do their work as easily as possible without annoyance to others.

No arrangement for the health, convenience or pleasure of the occupants should be sacrificed to any ideas of symmetry or external effect. Symmetry, as usually understood, forms no part of domestic architecture. It belongs to the monuments and great public edifices, where great dignity and grandeur is required.

Read Pliny's letter to his friend Gallus, describing his Laurentine villa. He speaks of the enjoyment he takes in the different rooms—the delightful views, the quiet retirement of his study, and the loveliness of his dining-room, stretching out even into the waters of the Mediterranean, the foundations touched by the waves.

It is evident that the plan was carefully studied, that each room should serve its purpose in the best possible way, and that no sacrifice was made to any other consideration.

2. *That architectural effect should be the simple result of structure and the practical necessities of the work.*

One of the best definitions of architecture is that it is ornamental and ornamented construction; that is, the construction should be of itself so arranged as to be ornamental; that is, the proportions should be pleasing, the openings and solids so disposed as to enhance the effect, and that each part should clearly indicate its purpose, and that the said purpose should be a useful one.

If further decoration is required, then the construction should be ornamented—that is, accented, as for example, working chamfers on the corners of posts, and cutting in design the edge of verge boards, etc. This is the opposite to constructed or applied ornament, which characterizes such debased and transitional styles as the new Queen Anne and colonial and many other forms of the classic renaissance and always indicates a low state of the arts.

3. The third principal is *that the material shall be used to the best advantage according to its character.* The meaning of this is obvious. Use wood as posts or lintels, remembering that it is composed of fibers that easily separate, though each is in itself strong, and that when cut across the grain wood is weak. When twisted work is required use iron, or brass when not too expensive. Be honest above all things, and never counterfeit one material by another. A single lie will ruin a whole structure.

In the entrance-way of the British Museum there is a piece of woodwork painted and sanded in imitation of granite that throws a network of doubts over all the truly fine stonework surrounding.

The fourth rule is that there should be a *universal fitness* of all things pertaining to the dwelling, for the thoughtful visitor will judge the occupants by the house they have built and by the choice and arrangement of the furniture and decorations. What may be fitting in a city mansion may be sadly out of place in a country or suburban house. The woodwork of the interior should be very well constructed and finely finished, but very simple in design.

The doors and easings are not the place for carving and heavy mouldings—such work only causes labor without giving a satisfactory return. Carving should be reserved almost entirely for the furniture and mantels, where it can be seen and appreciated. The furniture should always be superior to the woodwork of the room it occupies.

The fifth rule is that whatever is undertaken, however simple it may be, should be completed in a thorough, substantial manner, as architects say in their specifications; but it depends very much upon the contractor whether this is done or not. An architect is considerably at the mercy of a bad workman and, therefore, should never employ one under any circumstances.

Only a few years ago there were great hopes of a true national style. The American architects had joined the English in their endeavor to modify the early English gothic so as to adapt it to modern requirements, and well were they succeeding; it almost seemed as if the American architects were taking the lead, and that we should have a truly American style, suited to our climate, building materials, habits—but the fanciful transitional mixture of classic and gothic, known as Queen Anne, was allowed to become a passing fashion, and for a time to stop the rapid progress that we were making toward a style of our own. This Queen Anne and the colonial as well violate the best principles of architecture and cannot long hold the place they now have, and a return to the direct road toward the better things of a few years ago is already foreseen. It has become the fashion just now to know something. The public at large are reading and thinking, and good has already resulted therefrom.

Interior Decoration.

ITS DEVELOPMENT IN AMERICA.

LOUIS J. MILLET.

THE Philadelphia Centennial illustrated once again the impetus, which all exhibits of the sort give to the development of new ideas. So true it is that the collecting of old ideas will produce new thoughts; and through the agency of the Centennial the study of interior decorations, in which so little interest was taken but a few years ago, has been greatly advanced.

Interior decoration is a phase of the plastic arts, which blends the qualities of architecture, painting and sculpture, and, although it submits, or rather should submit to the supremacy of architecture, it claims the very authorship of the two sister arts, painting and sculpture. These two sister arts in the days of Pericles, under the guidance of their parent Architecture, were embodied by Decoration, and the artists' efforts were never applied to any greater object than to decorate a temple or a dwelling.

At that time the excellency of a work of art did not depend solely on the value of the work alone, but also, and perhaps more especially, on its adaptability to the spot it was to occupy and its harmony to the surroundings; for it was then rightly believed that "fitness is the soul of art." Unfortunately, since then the two sisters have quarreled with their parent and with one another, and we see painters and sculptors producing works that are meant to adapt themselves to no particular spot, and consequently adapt themselves perfectly to none. Works of art are scattered about an apartment with no relation of line, and placed merely against such walls as are best suited in size to receive them and make them conspicuous. Even architects have wandered in their expression of the beautiful and have remembered form and not tradition.

In the fogs and dampness of London, within a few years, there have been thoughtlessly built exact reproductions of Greek temples, every proportion, profile and line of which, was originally studied with due regard to the deep blue sky under which they were erected; to the surroundings and to the powerful sun, which lent its color and gave its deep shadows to the carefully studied details.

There is no doubt, however, that since 1876 a revival of art has occurred; and although all fine arts walk hand in hand toward progress or decline, still we think this revival most noticeable in the application of art to the decoration of interiors—probably on account of the sudden interest which the people have given the subject. Decoration of our day is not, and cannot be, on account of the complicated lives we lead, an art of perfect quiet and harmony, such as the ancients practiced. But it may become an art of strong effects, and although it is still slightly barbaric in its modes of execution and wild in its tendencies toward unlimited originality, it has the great redeeming feature of being a new effort, with no guide beyond the artist's taste and reason; with the widest of scopes as compared with the groove into which it had run, and without a tradition back of it. It may for these reasons be productive of a new chapter of art, and may some day, without copying the forms preferred by the ancients, recognize the excellency of their laws, without which no art can flourish.

The Hammond Library.

THERE is now nearing completion in Chicago a building which, when finished, will be a model for not only those devoted to similar purposes, but for all public structures. This is the Hammond Library, the gift of Col. Hammond to the Chicago Theological Seminary, and will contain the library of that institution. It consists of two stories and basement, and fronts upon Ashland avenue, opposite Union Park, immediately joining the Carpenter Hall and Seminary.

The front, which is composed of stone and pressed brick, with terra-cotta ornamentation, is neat and well designed. The structure, as a whole, is of the most substantial character, and the interior absolutely fire-proof. The floors, which are supported upon iron columns inclosed in porous terra-cotta, are framed on twelve-inch iron girders and eight-inch iron beams four feet eight inches from centers. The space between the beams is filled in with hollow tile arches covered on top with three inches of concrete. The roof trusses are of iron, eight feet centers, and these in every part, including principals, struts and ties, are completely covered with porous terra-cotta. The roof trusses support the iron purlins, space sixteen inches from centers, and between these are laid porous terra-cotta tiles, upon which a layer of cement is spread, bringing all to an even surface. The roof covering, which is slate, is laid upon the cement surface and secured by nailing through into the terra-cotta. A lantern of iron with side lights of heavy hammered plate-glass surmounts the roof and lights the interior.

The interior partitions are composed of brick and of hollow tiles. The stairways are of iron perfectly inclosed and protected by hollow tiling and terra-cotta. All the window openings are provided with rolling steel shutters, and all the doorways are fitted with iron doors.

The basement, which has a floor of concrete, is used for unpacking and general storage purposes, and contains the heating apparatus of the building. The first story, which is fifteen feet high, contains the reading-rooms and reference library. The second story measures twenty-three feet to the slope of the roof, and about forty feet to the lantern. Besides being lighted from the lantern in the roof this room has large plate-glass windows at either end, and will be used as the main library hall. Both floors will be fitted up with suitable finishings in hardwoods.

The smoke-pipe of the heating apparatus, which is made of sixteen-inch sockeled sewer-pipe, runs through the center of a large ventilating shaft placed in one end of the building, which secures ample ventilation to all the rooms. A hand freight elevator connects the basement with the main library floor. The shaft is of brick, and the doors at each story are protected by counter-balance iron doors. The library is connected at each story with Carpenter Hall, and these openings are closed by double iron doors.

The Hammond Library represents what can be done in fire-proof construction under the superintendence of capable architects, and may be taken as a standard wherever a building for the accommodation of valuable libraries or the storage of public records is erected. D. Addler & Co. are the architects.

MR. GEO. H. EDBROOKE, the well known architect, is now in Paris. In a letter received here January 1 he gives a graphic account of the escape of himself and wife from the "City of Brussels." He will return home about the first of March.

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The Calumet Club Building.

As the future home of the Calumet Club of Chicago is now ready for the decorator and furnisher, a perspective view, from a drawing by the architects, Messrs. Burnham and Root, and a description of the main architectural features is presented in this issue.

The walls cover a corner lot, 82x130 feet, and are of plain and moulded Chicago pressed brick, the latter brick being in original designs especially made for this building. A meagre use of terra-cotta adds to the decoration of the walls. All the bearing walls are of brick. The roof is of slate, high, isolated in style, but with none of the features of the Mansard. The plan of the interior is very commodious. The entrance hall is about 22x50 feet. The three large rooms to the left of the main hall, which form the card room, library and dining room, are each 35x78 feet. The billiard room and café, which are to the right of the main entrance, are together 38x78, and the dimensions of the assembly room, directly above these, are the same. Connecting these large rooms are the small card rooms and dining rooms. Between the second and third stories is the entresol story, which is included in the height of the assembly room and large card room. The club bed rooms occupy the east half of the third and fourth stories. The stairways, which are not included in the dimensions of the main hall, are arranged in a wide center with two side flights, with a large straight landing, upon which are wide groups of windows decorated with stained glass, including cathedral, opalescent and jeweled glass. There is an elegant passenger elevator, besides one for freight, connecting with each floor.

It is the intention to give to this club house an interior decoration and furnishing in keeping with the wealth its owners represent. Stained glass will be largely used, representing the best English antique and American opalescent stained glass, and the frescoing is in the hands of one of our best artists.

The building is situated on the northeast corner of Michigan avenue and Twentieth street. It will cost $150,000, not including the cost of lot or furniture. The latter, it is estimated, will figure about $25,000 additional.

Stone.

The recent movement in cities where wooden block pavements have proved unsatisfactory has brought the subject of stone suitable for paving into prominence. Medina stone is a dark red sandstone, closely allied to the sandstone of the Lake Superior region, which has become so extensively used for building purposes. It is the hardest stone known in this country that will not polish ; and though hard in texture it splits into any shape with facility and smoothness. It is supposed to underlie most of the northern continent of America. In the Lake Superior region it occupies a strat too low for successful quarrying. It underlies the limestone that forms a ridge through Western Canada and the Niagara escarpment, and appears in the excavation made for the Great Western railroad, where it passes under the Welland canal. It reaches the surface for a distance of about forty miles along the Erie canal in the neighborhood of Lockport, Albion, Medina and other towns in New York, and here it is most extensively quarried. As a paving-stone it has been used in eastern cities for two decades, and its permanent nature, coupled with its gritty and unpolishable surface, has proved it a valuable stone for this purpose. As a building material it is also extensively used, but has not so handsome an exterior as many of the softer sandstones, its permanent character being its chief virtue.

At Burlington, Vermont, a substantial roadway is secured by a judicious use of the refuse of a quarry of very hard red sandstone. The larger pieces are laid first, and covered with stone which has been passed through a crusher. This is rolled even, and then covered with a layer of finely crushed material, which being rolled makes a solid and permanent surface. The center of the street also serves as a drain, water passing freely between the large stones. This system is best adapted to localities where the grade is considerable, as standing water under the street would possibly be injurious to the surface stone.

Art Objects.

That we are rapidly developing into an art-loving people goes without saying. On all sides evidence is accumulating of this fact. It can be seen in the importation of pictures of the very highest grade, and the largely increasing attendance at art sales and annual exhibitions. It can be seen in the growing knowledge of many arts and their accessories, with which we were unfamiliar a few years ago. It can be seen in dress and in furniture and house decoration until it would seem that the ingenuity of man had been taxed to its utmost to produce new and effective designs to please the eye.

It is but a few years ago that the haircloth and rep-covered furniture were considered quite in keeping with most people of wealth. Gradually satin coverings took their place; carpets had to be in keeping, and the acme of house adornment was to be able to have a satin-finished paper on the wall. Ceiling decoration was confined to a few shades prepared by that man of genius, the "kalsominer."

The times have veritably changed, and to-day household decoration is as great a study and as high an art as the most finished work of a Deaz, Corot or Meissonier.

The writer recently paid a visit to the art rooms of Sypher & Co., 1253 Michigan avenue, and was agreeably surprised to find such a superb collection of art objects on exhibition. On entering the hall an old Venetian settle attracts attention, the borders of which are beautifully carved, with panels inlaid with ivory of rare design. It is a production of the seventeenth century. Opposite stands a Dutch musical clock about ten feet high, with carved case. The dial is silver and bronze, showing the calendar changes of the moon, and chimes every half hour.

The parlors are filled with Louis XVI cabinets, secretaries, sofas and chairs, rare porcelains, bronzes and enamels. The dining-room is very attractive, being furnished with old mahogany side-boards, side-tables, and carved dining-table with polished surface like a mirror, which perhaps once occupied a place in some of the old southern mansions of Virginia.

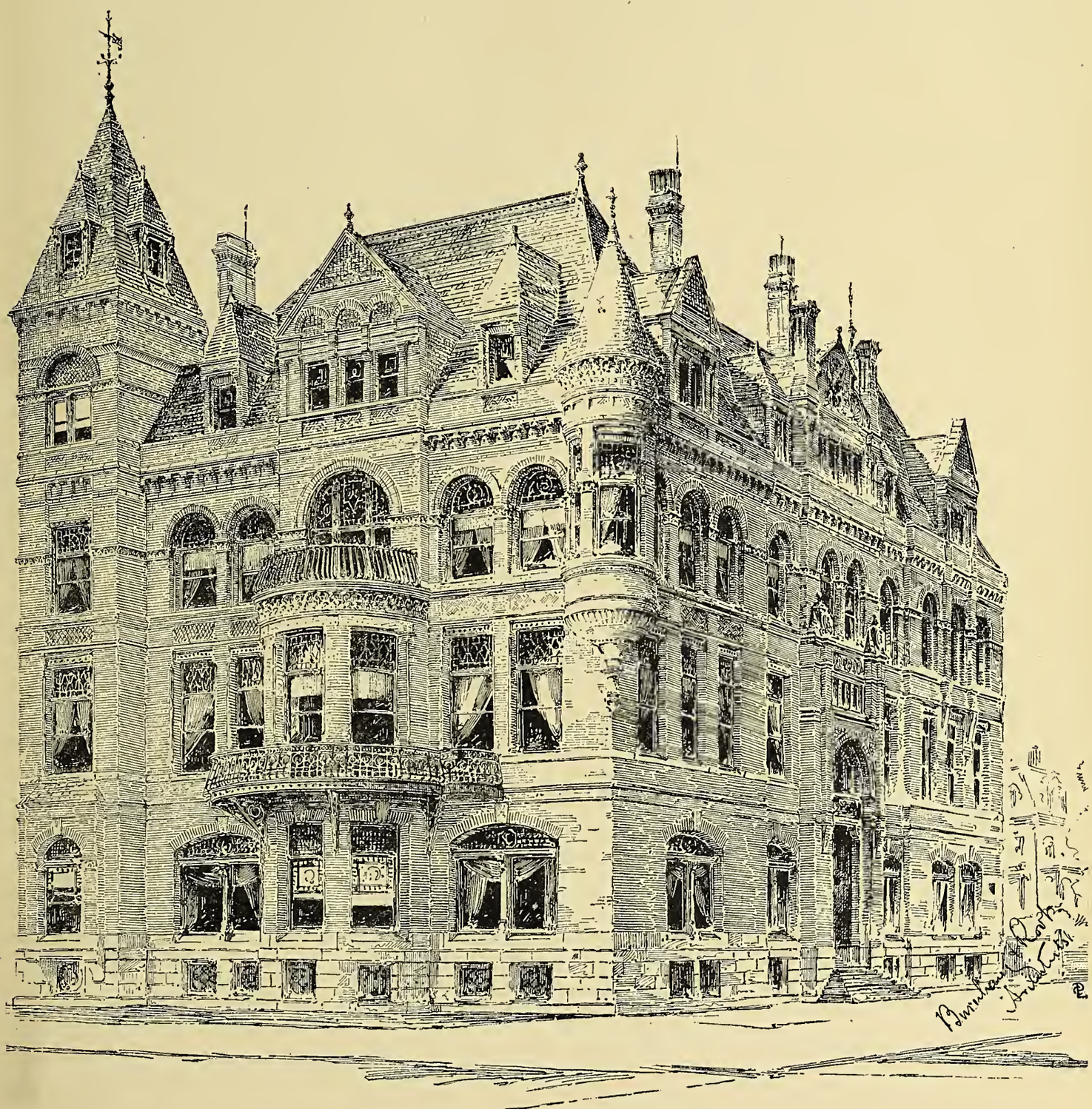
A bed-room set of Louis XVI style is particularly attractive. The wood is old mahogany of a rich color, inlaid with brass. There is also to be seen a rare and curious bedstead and bureau, with inlaid woods (representing birds and flowers) of beautiful design and workmanship, made in Holland over a century ago. The rarest and best piece in the collection is a carved Florentine cabinet or side-board, which is a marvel of beauty and artistic workmanship. The entire collection is a compliment to the artistic tastes of our people.

The Cathedral of the Holy Trinity at Omaha, now nearing completion, will not be dedicated at Easter as was intended. One of the chief features of this cathedral are the windows. Three of these are memorial windows (each measuring 12 by 25 feet) in memory of Bishops Kemper, Patteson and Selwin. The chancel windows (thirteen in number) are illustrative of Christ and the twelve Apostles. There are also other memorial windows in the nave. The Chicago artists, McCully & Miles, who executed the work, still have several of these windows on exhibition, and they compare favorably with the best work of stained-glass artists of Europe or America. A large part of the planning and management of this cathedral is in the hands of Bishop the Right Reverend Robert H. Clarkson, D.D. When it is finished it will be an architectural credit not only to that diocese, but the whole West.

A sample window in opalescent stained glass has just been executed by Kinsella & Haywood. The effect of shading in the opalescent is beautifully finished by that latest novelty in stained glass, the "jewel." The window is on exhibition for a short time at Jansen, McClurg & Co's, and is well worth a visit, as it expresses the many possibilities for artistic and beautiful effects by this glass.

The granite work on the Board of Trade building is set in lime mortar. Experience has shown that cement will discolor granite, and in time will penetrate through the stones several feet in thickness. Lime mortar well made is fully as tenacious as cement and does not injure even the finest white granite.

The Mutual Insurance Company, of New York, is about to build a magnificent structure for their own use on Nassau street, between Liberty and Cedar streets, New York. The frontage will be about 200 feet by about 120 feet deep. The first story will be of Hallowell white granite and the remainder of Bedford limestone. It will be eight stories high. Charles W. Clinton is the architect.



THE NEW CALUMET CLUB HOUSE.

Tapestries.

GENERAL SHERIDAN is the owner of four pieces of Gobelin tapestries, belonging originally to a set of eleven, illustrative of scenes in the life of "Alexander the Great," made by Leyniers, whose factory was situated at Brussels, early in the seventeenth century, and was the most renowned at that period, many of the famous workers from the Gobelins in France being among his employes.

Two other pieces of this set, or "hanging," are also owned in this country — one by Mr. Kountze, the New York art connoisseur, and the other by his brother, Mr. Herman Kountze, a banker at Omaha. The other five pieces are in the collection of the Garde Meuble in Paris.

The four owned by General Sheridan were presented to him while he was in Europe by an enthusiastic admirer and friend of the gallant "Little Phil." They were recently loaned to the Art Institute for public exhibition, and have hung on the gallery walls for the past three weeks, where they will remain until the 12th of March. These woven pictures are remarkable for the breadth and comprehensiveness of the designs, purity and fidelity of execution and the beauty and clearness of the colors, which latter have retained their brilliancy for over two centuries, although their age and the recent cleaning they have undergone have taken some of the original softness from them. The position in which they are placed is also very trying. A strong light streaming in from the skylights directly above is very effective in revealing the ravages time has made upon them. This might be mitigated by stretching a crimson cloth across the lights, which would give a softer light as well as a warm tone to the shadows which play upon them.

As mentioned above, the tapestries are hung on the walls of the gallery, which is situated on the right-hand side of the main stairway on the second floor. Three pieces, two of the larger and the small one, are hung on the west-side wall, and the other on the right-hand side as you go out, of the south wall. This one represents Alexander killing a lion. The inscription on a shield at the top — ALEXANDER INCENTEMLE ONEM UNICO VULNERE INTERFICIT — translated, tells us that Alexander killed this enraged lion with one thrust of his sword. In this piece four figures are shown and the forepart of Alexander's horse. One of his warriors is behind a tree, the other two are standing near the horse. Evidently they consider Alexander fully a match for the wild king of the forest, for there is no suggestion of lending him a helping hand in their actions. The soldier behind the tree appears rather frightened than otherwise. The next piece to this, on the left-hand side of the west wall, is a battle scene, and shows the great Thracian on his war charger in the midst of his warriors urging them on to the conflict. This scene is very spirited. In the background are the walls of a city before which the armies are fighting. Alexander is in the foreground forming his reserve corps into line, waving his sword, etc. This is the one General Sheridan most admires. The piece next to this, which is the smallest one of the four, is the most vivid in color, the blue water of the river being especially fine and noticeable for the faithful manner in which it is treated. In this scene, the inscription tells us that Alexander being overcome by the sweat and dust, and half dead from the wounds which he had received in the battle, plunged into the waters of the river "Cydni" or "Cydnus," to purge himself, and his strength being exhausted from the effect of his wounds, would have drowned but for the timely assistance of attendants, who put out in a boat and rescued him. In the last piece Alexander is represented, not, as has been erroneously stated in every description published, returning victorious from battle and receiving the gifts and congratulations of his friends, but according to the inscription at the top, he is just about to depart for battle. The inscription, literally rendered, says that Alexander, having heard of victories over his friends in various parts, arms himself with the help of his retainers, but, nevertheless, notwithstanding his haste to depart, takes time to pray to the gods for success.

All of the scenes are framed in a rich border, composed of designs of flowers, fruits and implements of war, with little cherubs or Cupids playing in each angle. The colors used in all the scenes and the borders are blues, yellows, greens, reds, whites and browns. The blending of these colors is very fine, and reveals a master hand, and are especially noticeable for the happy effect they give to each other. Nothing about any of the pieces impresses the observer as glaring or overdone, but all is one continued harmony, which we may imagine will last forever. One could look at them for hours, and go away and then come back and spend hours more, every minute of which would disclose some new beauty which had before escaped the eye.

To the generous owner too many thanks cannot be accorded for the pleasure he has given to the thousands who will view them and have not only their senses delighted, but will receive and retain lasting impressions stimulating them to a cultivation of all that is pure and lovely and beautiful.

NEW STYLES IN TAPESTRIES.*

Among the latest importations are elegant new silken fabrics to take the place of certain styles of lace curtains. The goods are too expensive, however, to come into general use at once, the prices ranging from forty to one hundred dollars and upward per pair.

*For this information we are indebted to G. W. Haskins, tapestry decorator.

The tendency is to return to solid colors. Quite a number of new fabrics are being introduced to supplant those which have been the fashion.

Sash-curtains will be more popular than ever, and, when made of Madras cloth or of silks in the soft ecru tints shown for this purpose, are very effective, and improve the fronts of many otherwise cheerless looking exteriors.

Tinsels in gold, silver and copper continue to be extensively used, not only in the medium and low grades, but in the most expensive tapestries imported. They are also being adopted by some of the lace-curtain workers, and have been used for some time with good effect in the woven laces made on the Jacquard looms.

Large, bold, scattered designs will be found to make the most effective hangings for most places.

CURTAIN-LOOPS.

The brass chains which are to be found in almost endless variety should not be used indiscriminately. They are appropriate for holding back very heavy portieres in hotels, theaters, club-houses, etc., but should be used very sparingly in private residences.

Art Notes.

THE exhibition of the Art League will open, February 26, in the large gallery of the Art Institute.

MR. CRAWFORD, a Glasgow merchant, is about to present the City of London with a statue of Burns, at a cost of $15,000.

MR. R. H. STODDARD is about to publish a memorial entitled "Sanford R. Gifford: A Glance at His Art-Life in Letters."

THE Japanese reception of the Art Guild was held at the guild rooms on the 27th ult., and was in all respects a most brilliant and enjoyable affair.

EDWARD V. VALENTINE, the Richmond sculptor, is working at an heroic statue of John C. Breckenridge, for Lexington, Ky., and a bust of Hayne, of South Carolina.

THE loan collection of paintings still remains in the gallery of the Art Institute, where they may be seen by the public for the small admittance fee of twenty-five cents.

SALVIATI has made a fine mosaic portrait of President Garfield, which he will present to this country to be placed side by side with that of Lincoln, which he also gave years ago.

A PROMISING young artist is Frederick Merk, of this city. He has just completed a statuette, "The Doctor," something in the style of Rogers' groups, but consisting of a single figure, "The Doctor."

DETROIT is to have an Art Loan Exhibition. A meeting was held in response to a call January 29, and a guarantee fund of $15,000 was called for, and fifteen gentlemen agreed to subscribe $1,000 each.

AT Thurber's gallery is to be seen G. E. Colby's latest wood interior. He calls it a "Summer Morning," and it is replete with all the dreamy muteness and poetry that generally characterize this artist's work.

OVER $500,000 worth of pictures from the private collection of George I. Seney were transferred to the Art Association rooms, on Montague street, Brooklyn, for the Loan Exhibition for the benefit of the Sheltering Arms Nursery.

MR. WYATT EATON has just finished a large crayon portrait of Mme. Modjeska, which is a most beautiful work. He has also recently painted a portrait of Bishop Potter, and has been commissioned to paint President Garfield for the Union League Club in New York.

WHEN a painter is elected to the Royal Academy he gives to the organization a picture which represents him. As the rule has existed since the times of Sir Joshua Reynolds, the collection is now very large. It is in the top of Burlington House, and a London paper asks that it be placed where the public can have access to it.

THE great block of marble, twelve feet in height, having arrived at Berlin from Carrara, Professor Schaper will speedily commence the Victoria statue for the Hall of Glory. This statue, with its wings, will measure fifteen feet in height, and be flanked by two figures in a sitting posture, each ten feet high, representing one the "Germania," the other the "Wacht am Rhein."

THE Fortnightly Club, composed of many of the wealthiest and most cultivated ladies of Chicago, is now in the tenth year of its existence. It is devoted to a high order of intellectual research and study. The room of the club is in the new Art Institute building and is a marvel of artistic arrangement and good taste. The colors of Raphael are the key to the decoration of the room.

MR. G. C. MUNZIG, the painter, writing to the Boston *Saturday Evening Gazette*, says: "The artistic atmosphere of Boston is not what it should be. It is narrow, ungenial, full of cliques and jealousies. The criticism in some cases is ignorant and partisan, and the surfeit of art-twaddle talked in and out of print is almost as discouraging as an absolute silence on the subject would be. Until the present day the efforts which have been made are individual rather than united. We have as yet no American school."

CINCINNATI LETTER.

Special correspondence.

Cincinnati, February 15, 1883.

Editor of The Inland Architect and Builder:

One week ago Cincinnati was ycleped the "Paris of America" to-day it is truly the Venice of America. I think I can safely predict a boom in building when the waters subside. Thousands of dollars worth of property have been destroyed and nearly every block of buildings in the "bottoms," will need more or less repairs. "'Tis an ill wind that blows nobody good"; so, while the poor are suffering now, and the laboring men thrown out of employment in consequence of the great flood, the principal sufferers are the pockets of wealthy capitalists, which same pockets will be a trifle lighter to the benefit of the laborer when his services are needed in repairing and rebuilding.

Many new dwellings will be put up here during the coming season, principally in Corryville, Clifton and Walnut Hills, our beautiful suburbs. Our architects are all busy and most of our builders and contractors are finishing up buildings in various parts of the city.

The new custom house is not finished yet. It will probably be ready for the plasterers by this time 1983, but then "Uncle Sam" is good natured. A building association here, called the United Building association, got on the war-path last week and called a meeting. The object of the meeting was to oppose the recommendation of the tax commission to compel the officers of building associations to list the shares of the individual members for taxation. It was agreed to call a meeting for Sunday the 18th inst., and invite every association in the city to be present and take steps to agitate and concentrate the opposition to the proposed measure of the Tax Commission.

Adam J. Bast has a great quantity of work on hand, principally for elegant dwellings.

J. W. McLaughlin is preparing a number of plans for new dwellings and business blocks. Mr. McLaughlin is the architect of the Art Museum and also drew the plans for the Queen City Club house, corner of Seventh and Elm streets, which is one of the most beautiful structures in the city.

Samuel Hannaford is one of our leading architects, and samples of his skill can be seen in a number of elegant buildings now in process of erection.

The Emery brothers are still building. They have erected more business blocks, hotels, private dwellings, French flats, etc., than any other two men in the United States, all within the last five years.

The Emery hotel, with its beautiful arcade, is one of the most notable structures in Cincinnati.

An exhibition of a patent fire-escape was given at the Grand Hotel on the 9th inst. The invention proved to be very simple. A canvas bag, large enough to hold three persons, was suspended from a crane fastened to the window frame, and the sack raised or lowered at will, the rope passing through a series of pulleys so arranged that the friction is on rubber. On this account, very little power is required to overcome the resistance. From one hundred and fifty to seven hundred and fifty pounds can be lowered by a power equivalent to eight pounds. The device is the invention of Frazer & Culver, of Rushville, Ind.

We have enjoyed a fine exhibition of painting here during the past two weeks, at Closson's gallery on Fourth street. They are the work of several young Cincinnati artists, who have lately returned from Europe. Some of the subjects exhibited are very fine, notably, "After the Rain" and "On the Lagoons," by Joseph Decamp, and "The Riva Schiavoni," by Theodore Wendel. J. H. Twachtman's Pappendrecpt is also wonderfully poetic. In fact all the works display a careful attention in drawing and detail, perfect knowledge of colors and harmonious relations between the artist and his subject.

The following building permits were issued since the 27th of January:

A. Gunnison, to build addition to five-story brick, Nos. 5, 7 and 11 East Fifth	$ 2,500
L. Keller, two-story brick west side of Riddle, near Bank	1,600
A. Marsch, two-story frame, east side of Chatham, near Locust	1,900
C. Bassenhorst, three-story brick, east side of Spring, between Woodward and Liberty	5,000
L. Beek, three-story brick, west side of Elm, between Elder and Green	4,500
H. Quenzel, two-story brick, east side of Marshall avenue, between Molitor and Burnet avenues	2,500
John Crotty, three-story frame, No. 24 Eastern avenue	1,500
Louis Stix & Co., seven-story brick, south side of Union street, between Race and Elm streets	20,000
F. Vitt, addition to three-story brick, Nos. 3 and 5 Fifteenth street	200
L. Rover, four-story stone front, east side of Elm, between Fourteenth and Fifteenth streets	5,000
John Ruskin, addition to two-story frame, west side of State avenue, between Eighth and Gest streets	350
Henry Van Matre, alter and repair two-story brick, northwest corner George and Plum	300
C. Pandler, three-story brick, No. 91 York street	4,000
Mrs. Demsey, one-story frame, southwest corner of Harrison and State avenues	200
G. B. Otoff, two-and-a-half-story frame, east side of Molitor, near Marshall avenue	1,900
Cincinnati Sulky Buggy Company, to tear down retaining wall, Nos. 7, 9 and 11 East Canal street	75
Mrs. Owens, to repair two-story frame, northeast corner of Court and Baymiller streets	600
Henry Schoenfelt, two-and-a-half-story brick, No. 260 Hopkins street	1,500
Blemont & Overbeck, two-and-a-half-story brick, south side of Jefferson street, near Calhoun	3,500
Mr. L'Hommedieu, to repair five-story brick, No. 120 Main street, between Third and Fourth	1,200
J. H. Bunuing, three-story brick, west side of Baymiller street, between Ninth and Richmond	3,500

C. M. A.

ST. LOUIS LETTER.

Special correspondence.

St. Louis, February 15, 1883.

Editor of The Inland Architect and Builder:

St. Louis greets the Inland Architect and Builder and please send us a copy, or several hundred copies will suit us better, as soon as you issue. Personally, I feel a lively interest in your enterprise, and anxiously await the appearance of the first number.

In your letter to me, you ask: "What kind of a reception will the craft at St. Louis accord it?"

In reply I will say, there is room for it here, and we will make it welcome, provided it contains but one-half the news you promise. Give us a place in the paper and we will do our part toward its support.

Building operations have not been so very lively of late, but the coming season promises to be one of unusual activity. The following items will give you some idea of our situation.

ITEMS.

An appropriate building for the Historical Society is a much mooted scheme just now, and there is every reason to believe it will be brought to a successful issue. A number of meetings have been held and vigorous plans projected and discussed. The one adopted provides for the formation of a corporation, to be known as the Historical Library and Museum company, with a capital stock of $75,000, in shares of $50 each. Some of the stock has already been subscribed. I am not in a position to state the amount, but it will require $60,000 to erect the building.

"It never rains but it pours." It is now proposed that in addition to the Historical Society building, we have an exposition building and music hall.

A new bridge is to be erected across the Mississippi at or near the Chain of Rocks in the northern part of the city, by a new company. Incorporators. John L. Ferguson and James Gibson, of St. Louis county; Joseph P. Card, Amos Hoffer, W. Llewellyn Hickman, Jacob Bittner and George S. Case of this city, and Holland B. Evans of St. Charles county. The contracts as yet have not been let. The estimated cost is about $4,000,000. I am not sure, but I think Mr. Amos Hoffer is the president of the corporation.

At a joint meeting or the school board, teachers and ways and means committee, on the 6th inst., it was unanimously decided to rebuild the Franklin schoolhouse.

Mr. Thomas Walsh, the well known architect finished the plans for the new St. Louis University on the 5th inst. The church and college buildings, with ground attached, are to cover two blocks situated on Grand, between Baker and Lindell avenues. The ground has a frontage of 460 feet and a depth of 360. Both the church and college building will be the Gothic style, in vogue between the thirteenth and fourteenth centuries in England. The college will be four stories high, the outer walls of stone and the front handsomely ornamented. The roof will be diversified with turrets and angles. The front will also be terraced. Cloisters will closely connect the church and college, making them for all practical uses one building. The cost will probably reach $500,000, and when completed will be one of the handsomest and costliest educational buildings in the United States.

A large quantity of the granite trimmings designed for the Cincinnati Museum were recently finished at Knob Lick quarries, in Madison county, and shipped to that city.

The Ironton Manufacturing Company will put $8,000 worth of improvements in their mill during the coming spring.

A boom in building is reported from Mexico, Mo. Ex-Governor Hardin is erecting a magnificent business block on the corner of Jefferson and Promenade streets; architecture the most modern; cost, $10,000.

BUILDING PERMITS.

Sixty-six permits for new brick buildings were issued during the month of January, to cost $72,885. Permits for additions to old bricks to cost $8,240; nine new frames, to cost $5,210; three iron-clad structures, to cost $10,000; five brick tenements, to cost $8,600; twenty-nine brick dwellings, to cost $87,500; sixteen frame dwellings, to cost $13,000, and six stables, to cost $1,125. The total number of permits issued was eighty-eight; total estimated cost of property to be erected, 208,865.

LUMBER.

Figures are published representing the lumber at St. Louis for 1882, which show as follows: Total receipts by rail and water, 513,408,370 feet; total shipments, 400,000,000 feet; stock on hand, January 1, 113,000,000 feet; total receipts of hardwoods, 141,000,000 feet. The river receipts were, in detail, as follows: White pine, 162,682,830 feet; yellow pine, 512,740 feet; ash, 3,334,748 feet; white wood, 11,841,915 feet; walnut, 2,039,680 feet; oak, 1,903,457 feet; cotton wood, 2,530,000 feet; total, 184,848,370 feet. Also, 56,835,209 shingles, 35,247,014 lath, 1,451,248 pickets, and 4,231,763 feet of logs. The items of total hard wood receipts are given as follows: Yellow pine, 65,000,000 feet; oak, 25,000,000 feet; ash, 5,000,000 feet; poplar, 25,000,000 feet; walnut, 5,000,000 feet: cotton wood, 3,000,000 feet; gum, 3,000,000 feet.

Fence boards advanced fifty cents per thousand feet on the 9th inst. Lumber dealers anticipate a boom as soon as fine weather begins. Receipts and shipments this month are light.

Five car-loads of pine bridge timber were sent West by the Schulenburg & Boeckeler Lumber Company on the 9th inst.

The Eau Claire Lumber Company shipped ten car-loads of white pine lumber North on the 10th inst.

A new planing mill is to be erected at an early date at Sixteenth street and Cass avenue.

The Schnelle & Querl Lumber company received four car-loads —40,000 feet—of Michigan pine lumber at their switch, Second and Angelica streets, on the 10th inst.

Phil. Schultz of the General Planing Mill, received three car-loads—30,000 feet—of yellow pine lumber on the 10th inst.

E. L.

ST. PAUL LETTER.

Special correspondence.

ST. PAUL, February 15, 1883.

Editor of the Inland Architect and Builder:

Notwithstanding the very severe cold and the unusual amount of snow we are experiencing this winter, conditions which a few years ago would have been deemed sufficient to utterly prevent all building operations, a number of new buildings have been commenced and the foundations actually put in. The coming spring promises to be an unusually busy one for the craft. Just as soon as the weather will permit, work will be commenced with energy under the stress of necessity, and with the full appreciation that the work already marked out for the season will strain every faculty.

The West hotel at Minneapolis, as already indicated in dispatches from Chicago, where the awards were made, is to be under cover by the 1st of December next and is to be ready for occupancy by the 1st of January, 1884. When completed it will undoubtedly be one of the finest hotel buildings in this country. It is to be seven stories high, 190x170 feet on the ground, and built of red brick and Joliet marble. The principal contracts now awarded are to Agnew & Cox and E. R. Brainerd & Co. The original estimate of the cost was $500,000, but it is thought now that the superstructure will cost more than $800,000. This is exclusive of the furniture and decorations, and a round million will hardly cover the entire outlay to be made. Mr. Buffington is the architect.

Alterations are soon to be made in the Academy of Music building to provide an acceptable space for a private law library, donated by Mr. Thomas Lowry.

Capitalists interested in the new National German-American bank recently purchased the valuable business property at the northeast corner of Robert and Fourth streets, 100x100 feet. Messrs. Mann & Willins intend to put up a $150,000 structure on the corner.

Messrs. Pabody & Whitaker have let the contract for building a block of seven brick tenement houses at the corner of Third avenue south and Eighth street, which are to be supplied with all modern conveniences. The plans were drawn by Mr. Haley, and the work will be done by contractor Delaney. The cost will be $25,000.

A block is to be built by Dr. Emery at the corner of Chicago avenue and Fifteenth street. Estimated cost, $45,000.

Nettie Connelley is to build a large four-story brick house on Second street, early in the coming season, from plans drawn by Hon. W. H. Grimshaw.

The St. Paul, Minneapolis and Manitoba railway people are building extensive warehouses on property on Western avenue.

Charles W. Johnson contemplates erecting a commission house the coming season.

James Chalmers is to build on Highland avenue, Oak Lake Addition, as soon as the weather will permit.

J. K. Wilson has drawn plans for an extension to the Chute block on the east side.

Bart Cooper was recently awarded the contract for the building of the Fifth Presbyterian church, and the work will be pushed to an early completion.

Ten new houses, all of them to cost over $2,000, will be built in Oak Lake this season.

The extension to the Barton block, adjoining the Academy of Music, is now nearly completed. It is run up to four stories, and presents an imposing appearance.

The repairs of the Hurlburt block are nearly completed. Plant & Whitney are the architects in charge.

The opera house at Minneapolis is nearly finished, but, as it is to be opened largely by home talent, assisted by Gerster, Litta and other professionals, the preparations will delay the opening until some time in April.

The excavations for the new opera-house to be built for Commodore Davidson are made. McElfatrick & Son, of St. Louis, are the architects.

In closing I cannot but commend the enterprise you are about to inaugurate, and wish you "God-speed." We will try to help you on a little bit up this way.

ST. PAUL.

DETROIT LETTER.

Special correspondence.

DETROIT, February 14, 1883.

Editor of the Inland Architect and Builder:

Your letter to me containing a request for a letter detailing what the architects and builders are doing in Detroit was received with surprise and gratification. I say gratification because I was very much pleased indeed to learn you were about to publish a paper devoted exclusively to the interests of western architects and builders. It is a thing we have long needed, and I think I can safely promise you a fair support from the craft here in Detroit. You will issue your paper at a very opportune moment, so far as our city is concerned, as the building operations here during the present year will be more extensive than for many years past. Most of our architects are overrun with work, and our builders have a large number of contracts on hand, and are only waiting until the weather moderates to begin operations. The following schedule of one architect's operations was recently published in the Free Press:

Warehouse for Union Chairworks, Congress street, west	$18,000
Factory for National Iron and Wire Works, Congress street	10,000
Double brick dwelling for August Goebel, Columbia street east	7,000
Double brick dwelling for Chas. Baxter, on Willis avenue east	7,000
Double brick dwelling for Mr. Worthington, Montcalm street east	6,000
Brick house for Philip Roos, Willis avenue, near Second	5,500
Brick house for Seth Smith, Fourth avenue, near Bagg street	3,500
Three wooden dwellings for B. Hayes, corner of Willis and Second street	7,500
One wooden dwelling for Thomas Kelly, Fifteenth street	7,000
One block of stores for E. J. Mills, of Howell, to be built in Fowlerville	3,500
One block for publishing office of the Pioneer, in Vassar, for Mr. Trotter	3,000
Frame dwelling for E. J. Tanner, of Otter Lake	2,500
Total for January	$75,000

The architect is Mr. A. C. Varney, one of the leading architects of this city.

On Woodland avenue, which is one of the prettiest streets in the world, many new private dwellings have just been completed, or are in process of construction. Some of them are very handsome—perfect palaces in fact, most of them being constructed after the French villa styles, red pressed brick being generally used, with trimmings of red sandstone, various colored marbles, tiling, etc.

NOTES.

Architect Anderson furnished the plan for the alterations in the City Hall. The plan provides for an elevator to be placed in the corner office on the lower corridor, and to run to the fourth floor. The estimated cost will be $6,000.

Another new block is to be erected on Jefferson street, between Griswold street and Woodward avenue. James Burns and John Owen are the owners of the property, and have decided to erect a handsome business block five stories high. The tenants at Nos. 161, 163 and 165 Jefferson street have been notified to remove. Messrs. Smith & Brown are preparing the plans.

A new front to the Jackson school building on Larned street will be erected next summer. Arrangements are being made for the erection of the new passenger depot of the Michigan Central railroad. Work will be begun about March 1. The contractors for the carpenter and mason work are already engaged.

The Detroit Tower Company are known all over this country for the excellence of their work. Two of their towers erected at Denver, Colorado, stood the test of the severe storm on the 29th of January, which is said to have been one of the most destructive cyclones that ever passed over Colorado. The amount of damage done to surrounding property was over $200,000.

A fire escape invention tested at the Griswold House, February 2, in the presence of a large crowd of spectators, was apparently very effective.

The Board of Public Works, in their annual estimates, incorporated the sum of $20,000 for the improvement of the boulevard. Alderman Gies is making an effort to have the royalty on pavements paid by property-owners on St. Aubin avenue, between Mullett street and Gratiot avenue, refunded.

J. R. Myers, of West Branch, recently sold about 1,000,000 feet of pine, on section seven, to Folsom & Arnold, of Bay City. Price $2,300.

The citizens of Standish propose to build a town hall. Six hundred dollars will be raised for the purpose by taxation.

BUILDING PERMITS.

The following are some of the building permits lately issued. They are all I could secure for this number of your paper, but I hope to send you a complete list for your next issue:

F. J. Barbier, frame dwelling, No. 400 Michigan avenue	$ 100
Lyman Riggs, frame dwelling, No. 164 Locust street	2,700
Also, frame dwelling, Milwaukee avenue	500
Lorence Bolorowiez, frame dwelling, No. 449 Prospect street	300
John Kleinkneeht, frame dwelling, No. 347 Croghan street	1,300
A. H. Adams, brick dwelling, No. 205 East Larned street	5,000
Everson & Christiansen, frame barn, Myrtle street	250
Wm. H. & C. F. Gibson, two frame dwellings, Nos. 939 and 941 Fifteenth street	1,000
Also, three frame dwellings, Selden avenue	1,500
Also, four frame dwellings, Frank street	2,000
B. Sheid, addition to frame dwelling, No. 234 Calhoun street	370
Also, frame addition to brick dwelling, corner of Baker and Twentieth streets	200
Charles Gill, addition to frame dwelling No. 119 Jay street	100
Henry Maybury, repairs to frame dwellings, Nos. 123 and 129 Eighth street	600
William Tait, repairs to frame tenement building, Nos. 132-6 Jones street.	1,000
Nick Turnelli, addition to frame dwelling, No. 83 Sherman street	200
Jacob Reuter, two frame dwellings, Nos. 113 and 115 Kentucky street	1,000
Martin Eiguick, frame dwelling, Georgia street	300
Martin Kopedloski, frame dwelling, Superior street	400
Chas. A. Allen, frame dwelling, No. 344 Seldon avenue	700
George W. Maltz & Co., frame dwelling, No. 475 Baker street	900
Lachlin Currie, frame barn, No. 33 Pitcher street	130
John Ruppell, two frame dwellings, Nos. 234 and 226 Humbolt avenue	1,400
J. Gozienienski, frame dwelling, No. 127 Leland street	300
R. Rochoverh, frame dwelling, No. 117 Leland street	300
John Winkelmier, frame dwelling, No. 424 Thirteenth street	400
James Bartlett, frame dwelling, 115 Myrtle street	860
H. S. Peoples, frame dwelling, No. 533 Twenty-third street	1,150
Also, seven frame dwellings, corner of Twenty-fourth and Buehanan streets	5,000
Fred Bonswer, frame dwelling, No. 163 Myrtle street	1,000
Joseph Christian, frame dwelling, No. 716 Fourth avenue	900
J. H. Hooper, frame dwelling, Third street	1,800
Robinson Bros. & Co., frame planing mill, Twenty-fourth street	5,000
Heek Bros., frame dwelling, Sherman street	2,000
Wm. Schulte, two frame dwellings, Nos. 41 and 43 Wilkins street	1,075
A. Beaton, frame dwelling, No. 261 Crawford street	2,000
Fred Ursprung, repairs to frame dwelling, No. 92 Sherman street	300
Fred Sheer, addition to frame dwelling, No. 651 St. Aubin avenue	350
John C. Pfeffer, addition to frame dwelling, No. 55 Bronson street	200
Total	$44,525

BUILDER.

Lumber.

SECRETARY HOTCHKISS, of the Chicago Lumberman's Exchange, in his review for 1882 says: "While I was enabled to speak of the season of 1881 in my summing up of the work of the lumber dealers of Chicago for that year as the most lucrative and energetic of any which had preceded it since the inception of the lumber business in this city about the year 1834, it is with pleasure at this time that I may point to the business of the season of 1882 as one far surpassing even that of its predecessor, at least in its volume of receipts and shipments, if not in its lucrative character. Opening with a stock on hand January 1 of 560,416,842 feet of lumber and 260,006,494 shingles, the receipts of the entire season to December 31 aggregated 2,116,345,150 feet of lumber and 1,040,818,750 shingles, making a total of resources for the season of 2,676,761,992 feet of lumber and 1,301,725,244 shingles, being an increase in the year's resources of 272,282,319 feet of lumber and 247,928,244 shingles. Of this immense supply the tables of reported dispositions show that there was disposed of through the medium of shipments and city sales 1,974,543,655 feet of lumber and 909,758,144 shingles, or as shown by the tables collated from the monthly reports of stock on hand, 2,001,000,000 lumber, and 905,000,000 shingles. The yards of Chicago dealing in pine lumber embrace one hundred and six reporting stocks, including four at South Chicago, while the hardwood business embraces twenty-eight yards, of which six carry little or no stock, and form but a slight factor in the collating of the monthly reports. Of the receipts of the year, dockage was paid on 300,000,000 feet of lumber, 584,000,000 shingles, 27,000,000 lath, and 83,000 posts, stopping at the Franklin street cargo market for sale, while probably a fair estimate of the cargo sales by commission dealers "to arrive," consequently not stopping at the docks controlled by the exchange, would swell the actual market to 500,000,000 feet of lumber, 700,000,000 shingles, 35,000,000 lath, and 2,000,000 posts and ties. The Chicago lumber stocks on January 1, 1883, amounted to 665,013,520 feet, an increase of 64,444,892 feet over the supply of December 1, 1882.

NOTES.

C. M. Slade, of Montrose, Genesee county, Mich., is shipping basswood lumber to Connecticut.

The failure of the well-known lumber firm of Ferry & Bro., at Grand Haven, Mich., was not unanticipated.

A prominent lumberman of Cadillac, Mich., says that the lumber trade cleared almost $325,000 last year in that city.

It is rumored that a certain Muskegon lumberman during the year 1882 cleared exactly $300,000 out of his lumber business.

A new lumber company, called the Pinconning Manufacturing Company, capital $50,000, has been formed at Bay City, Mich.

A new lumber and shingle mill is soon to be erected near Rosscommon, on a branch of the Au Sable river, by a party from Lake Point, Newaygo county.

The Western shingle product for 1882 is estimated by the *Northwestern Lumberman* at 4,094,277,658 pieces, against 3,546,006,817 in 1881, and 2,972,912,160 in 1880.

John Torrent, of Muskegon, has sold $20,000 of his stock in the Torrent & Arms Lumber Company to E. C. Mizner and Ray W. Jones, each of them having a $10,000 interest.

Of the White River log crop at least forty per cent of the intended cut is now banked or piled on logging railroads for delivery to the water very early in the spring.

The Saginaw lumbermen are thoroughly aroused at the blow threatened against their interests by putting lumber on the free list, and are making a strong kick against the movement.

Fourteen miles north of Charlotte is situated the only hardwood lumber camp in that section of Michigan. Teams are hauling from it at the rate of 50,000 feet per day to a single mill.

Lumbering is being carried on very extensively in Otsego county, Mich., this winter, but the deep snow in the woods, which is now three and one-half feet deep, is proving a serious hindrance to successful operations.

The pine land suit between A. J. Fair, of Detroit, and John Whyte, of Ridgetown, Ont., in the United States Court, has been settled, Mr. Whyte making a reduction of $15,750 on his claim. Fair loses about $7,000 but will resume business on a sound footing.

Competent judges place the cut of the Duluth, Minn., mills next season at 141,000,000 feet, and a correspondingly larger increase in the manufacture of lath and shingles. Comparing the log cut and the capacity of the mills it looks as though more mills were needed immediately.

The firm of A. H. Petrie & Co., lumber dealers of Muskegon, has been dissolved, Mr. A. H. Gilman selling his interest in the pine lands and stock but still retaining his interest in the saw mill at North Muskegon. The firm—A. H. Petrie and Wm. McMillan—will be known as heretofore.

It is reported that the Michigan Central railroad has purchased of T. H. McGraw the Saginaw Bay and Northwestern logging railroad for a consideration of $139,000. The road is thirty-six miles long, and extends from the shores of the bay into the heart of some of the best pine in northern Michigan.

The lumber dealers of Chicago and Michigan City are protesting against alleged discriminations in freight charges by the railroads in favor of eastern and upper Michigan. They claim to be losing heavily in trade in consequence of the present tariff. The railroads are considering the complaint.

The Duluth lumber exchange held its annual meeting last month. The following officers were elected: President, T. A. Barber; vice president, George Green; secretary, A. C. Arveson; treasurer, H. M. Peyton; executive committee, George Green, D. G. Cutter, J. W. Norton, D. A. Duncan and E. C. Bradley.

There is, as there was at this time last year, a considerable divergence between the views of buyers and sellers in regard to the probable price of lumber to be cut. As seasoned stock was never known to drop in price in the winter, and there will be no new stock for several months, the probabilities are the intricacies of this question will be settled as heretofore by time and circumstances, and it is not worth while to bother about the bridge until the river is reached.

There are 40,000 square miles of almost unbroken forests in North Carolina, comprising pine, chestnut, oak, maple, beech and hickory timber in their finest growth. It is estimated that in ten years the timber alone in North Carolina will exceed in value the present total valuation of all the property in the state, including land. The state grows nineteen varieties of oak and its pine forests are of the heaviest. The building of new railroads will rapidly open this region to the northern and eastern lumber markets.

The demand for southern pine for Northern consumption and export is rapidly increasing, and the country must not make the mistake which it made first in regard to the pine supply of Pennsylvania and Michigan, and which the Californians are now making in regard to their redwood, and conclude that because the southern states contain vast quantities of pine, the supply will last forever. No forest is inexhaustible if nothing is done to protect or perpetuate it. The recklessness which marked the management of forest property in the North has not been wanting in the South. The southern pine forest, as it stands to-day, is mature throughout and ready for the axe.

The report of the census department shows some very interesting figures regarding the lumber industries of the United States. The number of establishments for the entire country is 25,705, having an aggregate capital of $181,186,122, and employing 148,000 hands. During the census year the value of lumber used by these mills was $139,836,869 and the value of the product after being sawed was $233,369,529. Over $31,000,000 was paid out in wages. According to the value of the products, Michigan ranked first with $52,449,928; Pennsylvania second, with $22,457,359; Wisconsin third, with $17,652,347; New York fourth, with $14,336,910; Indiana fifth, $14,260,830; Ohio sixth, $13,864,460; Maine seventh, $7,933,868, and Minnesota eighth, $7,366,038.

The state mineralogist of California estimates the quantity of lumber cut each year in California and shipped eastward at 70,000,000 feet. Cord wood is sent in about an equal quantity. The heaviest drafts on the mountain timber have been for Nevada use. The Comstock lode alone required 1,000,000,000 feet. Notwithstanding this cutting, the replenishing goes on, and no fears are felt for a lack. The Truckee basin and the region around Lake Tahoe have been resorted to most for timber of any regions of the state; but they represent, it is said, but a small fraction of the timber-bearing surface of the mountains, say 20,000 acres out of a total of several million acres east of the main summit of the Sierra Nevada range. Estimates claim that there is timber enough on the eastern slope of the mountains, between Hope valley and Beckwith pass, to supply Utah and Nevada for half a century, not taking into the account the reproduction that is in progress.

The southern pine belt, running through nine states, is believed to have contained, at the end of the census year, not less than 25,000,000,000 of feet of merchantable pine, or enough to last, at the rate of consumption of that year, some 250 years. The value of this great body of timber is enormous and must have an important influence in developing the material prosperity of the South. The study of the actual condition of our forests indicates important commercial changes which may be expected to grow out of the changing conditions of the lumber trade. New Orleans seems destined at no distant day to become one of the greatest lumber distributing and manufacturing centers of the world. Its position with reference to vast forests, its commercial importance and the ease with which logs may reach it by river and lake, point to this conclusion. A great deal of northern capital has been invested during the last few months in southern pine fields and the number of persons seeking such investments is increasing. The best informed northern lumbermen realize at last that the time has come when they must seek new fields for their operations or abandon the business entirely. These men are getting ready to move their mills, capital and energy into the South and their attention is naturally directed to the Gulf States.

Architectural and Building Notes.

The new church in Pullman was opened for services on the 28th of January.

Erection of buildings at night by means of the electric light is becoming quite a common thing all over the country.

The contract for two mail elevators for the St. Louis custom house was on Friday, January 26, awarded to W. E. Hale & Co., of Chicago, for $3,500.

A permit was issued to the North Division Railway Company January 26, to erect a three-story office building, 54 x 125 feet, at the corner of Clark and Division streets, to cost $25,000.

A co-operative apartment house is to be erected some time during the coming spring at the southwest corner of Superior and Rush streets. The plans are now being drawn by Cobb & Frost.

The Master Plumbers' Association held another meeting on the evening of the 15th inst. Mr. A. P. Creque, of New York, read an interesting paper on a new circulation range boiler.

Architect Eagan has submitted to the Committee on Buildings a set of plans for the improvement of the ventilation of the jail and criminal court building. With few exceptions the plans contemplate the restoration of the original system.

Recent excavations show the ground to be frozen to the depth of eighteen inches and the few builders who refuse to wait for warm weather are breaking ground at the extra expense of the difference between thirty and fifty-five cents per foot.

The Pennsylvania Railroad Company contemplate the erection of a handsome and convenient depot on a tract of land on Anthony avenue near Commercial, South Chicago, which they acquired by purchase during the past month. The price paid for the ground was $15,000, and the buildings will be proportionately expensive.

Architect B. W. S. Clark, of McCormick block, has prepared plans for a block of stores and a warehouse on State street, near Sixteenth, for Allen Bros., to cost about $60,000. Work on the structures will be begun in the spring. The same architect has also prepared plans for an $8,000 residence for Mr. T. Williams at Oak Park, and a block of stores and flats on West Jackson street to cost $20,000.

The Calumet Iron and Steel Company are rebuilding the nail department of their works at Cummings, which was recently destroyed by fire, and expect to have the nail-mill rebuilt within two months so that work can be resumed. The nail-mill is to be a frame and the nail-house of brick. And it is claimed the mill will be the most complete in the United States when finished. It will cost about $200,000.

The fire underwriters and the council committee on fire and water held a joint conference on the 16th inst. The meeting was held to consider a petition emanating from the insurance fraternity, relative to limiting the height of buildings. After some deliberation upon the matter the following resolution was passed: *Resolved*, That the corporation council be requested to draft an ordinance to prohibit the erection of buildings in Chicago to any greater height than eighty-five feet, unless such buildings shall be constructed wholly of fire-proof material, and then to be used only for office purposes.

The use of terra-cotta as an ornamental finish to a pressed brick wall is, we are glad to see, becoming general. Before the great fire very little was manufactured in Chicago, and that of an inferior quality, but since that time, while the improvement has been slow, the work of introducing it seems to have been slower. But now that its value is generally accepted too much praise can hardly be awarded to Messrs. True & Brunkhorst, who have worked patiently and persistently for years in its manufacture. Their organization of the Northwestern Terra-Cotta Company and the adding to their other works a large three-story factory, completed and equipped with a large amount of special machinery, is certainly an indication of the success which has at last crowned their efforts.

The tenement-house inspectors looked over forty-one houses, one hundred and forty-two factories, forty-five stores, and four miscellaneous buildings last month, and served eighteen notices and abated nineteen nuisances. No. 549 South Clark street, a three-story basement brick, owned by Emelo De Steffano, is occupied as a rag shop, a saloon and a shoe store; and four families of sixteen persons live on the first floor, three of thirty-one on the second, and one of fourteen on the third. The fifteen rooms are used by sixty-one persons, and a wood-shed in the rear by two families who have eight lodgers. All the families take lodgers. The walls are dirty, the plumbing bad, and most of the rooms are unventilated. Nos. 561 and 563 South Clark street, a two-story brick, owned by the same party, contains two saloons and twelve families of eighty-three persons, who live in twenty-two rooms. The Italians in this instance, as in the other, take lodgers, which accounts for the large number of persons there. The walls are dirty, the pipes leaky, and the rooms overcrowded. Buildings are to be put up in the rear next summer.

Personal Gossip.

The coming season promises to be unusually brisk in building circles.

Cobb & Frost are busy with a number of plans for large business blocks and dwellings.

New styles in terra-cotta and Pompeiian red are used for halls, libraries and dining-rooms.

A combination of electric blue and shell pink in wall-papers is used for parlors and chambers.

P. B. Wight, Esq., has gone east upon an extended business trip. He will be gone a month.

Nearly every roof in the country will need more or less repairing after the snow is all gone.

The new Calumet Club House is to have costly hangings throughout the whole interior, furnished by Haskins.

A set of designs for the Plankinton residence by Almini for a drawing-room carpet has been sent to Europe to be manufactured entire.

Our roofers anticipate a harvest when the beautiful snow is fairly melted. Indications are they will not be disappointed.

A. H. Lord, 339 Wabash avenue, is finishing several Iowa marble mantels, all of which are unique and beautiful in design, etc.

S. A. Maxwell makes a specialty of combining hand-painting with paper decorating, thus breaking the monotony of exclusive paper hanging.

D. F. Crilly and C. H. Blair, of Crilly & Blair, contractors, are sojourning at Los Angeles, Cal., on a pleasure trip. They will return about March 1.

The character of the work going into the Mitchell residence at Milwaukee is shown by two grates supplied by Albert A. Riley, of this city, at a cost of $700.

C. L. Page, 333 Wabash avenue, makes a very fine display of imported tiles. This gentleman also furnished some of the tiles for the Calumet Club building.

R. Philip Gormully, the well-known manufacturer of galvanized iron cornices and general house trimmings, is very busy making estimates and getting out work for the coming season.

M. B. Bushnell, the well-known theater builder, called at the Inland office on Tuesday, and reports the prospect for theater and opera-house building to be exceedingly good for the coming season.

The Powell Roofing Company have a large number of contracts on hand already. They received orders from the country during the past two weeks which alone will keep them busy for the next three months.

Mr. J. Dunfee, of J. Dunfee & Co., is east on business. The wood carpet made by this firm is in demand all over the country. They recently shipped large orders to Cincinnati and Philadelphia, and are shipping an order this week to Washington city.

Mr. A. Feidler, the decorator of the Nickerson House, is very busily occupied in superintending the decoration of other dwellings, which will present new surprises and developments of his cultured taste when completed and thrown open for "society's" inspection.

Henry Dibblee, 226 Wabash avenue, is making some very ornamental (wrought iron) gates, renaissance style, for the general offices of the C. B. & Q. railroad. The wall tiling for the Calumet Club House was furnished by him, being specially imported from Maw & Co., Shropshire, Eng.

The Anderson Brick Company, 157 La Salle street, furnished all the plain and ornamental pressed brick for the Calumet Club building. This brick is one of the prettiest as well as one of the most durable bricks manufactured. This company have been running all winter to enable them to fill their orders. They are making extra preparations and getting out many new designs for the decoration of interiors for the coming season.

The sash, door and blind manufacturers of the Northwest met recently in club-room No. 2 of the Grand Pacific Hotel. The state of trade was discussed, and it was stated that the prospects were exceedingly good for the future. The matter of a revision of the price-lists was referred to a special committee, who will report to a meeting to be held at the same place on the 22d inst. at 2 P.M. They will report in favor of an increase in prices.

Our architects are all busy. Some of the plans they are preparing call for buildings of greater magnitude than any constructed for some time. Burling & Whitehouse have a great quantity of work on hand. Among their plans are one for a large seven-story apartment house 90 by 90 on the North Side, and one of three stories 35 by 111, also on the North Side. Among their plans for heavy buildings are one for a four-story warehouse 140 by 150; also one of seven stories 60 by 120, to be occupied as a store. This firm are the architects of the First National Bank building, and are also superintending the alterations on the old First National Bank building.

Some of the most noticeable work about the Nickerson mansion are the bronze trimmings of the doors, windows, etc. With the exception of part of the first floor, these were all furnished by Kellogg, Johnson & Bliss, No. 108 E. Randolph street. Mrs. Nickerson selected some of the trimmings, but left most of that work to the good taste of the firm. The hangers for the large, heavy sliding-doors were originally ordered from New York and put in, but proved inadequate to the heavy weight to be sustained, and were taken off and new substituted, which are made expressly by this firm for heavy work. Mrs. Nickerson has expressed herself as very well pleased with all the work.

The work of decoration has reached a standard of excellence never before attained in Chicago. The development of this art is apparent in some of the more elegant business establishments as well as in the residences of many of the wealthy and refined. A fine specimen of decorative art is that seen at Dale's new drug palace, in the Central Music Hall building, the work of Mr. J. McDermott, of this city. The ceiling is a beautiful piece of work, being finished in panels of pale blue interspersed with fern-leaves in gold. These panels are broken at the sides and ends with triangles of black velvet edged with gold, in which are eight new and original designs in hand-painted work. An elegant English frieze in gold similarly treated forms a striking feature. The new tropical designs and the combinations of colors here introduced, and studied with a view to harmonizing with electric light, produce a beautiful effect under its strong, bright rays.

New Patents.

The following list of patents were issued during this month to western inventors.

Baumann, F., Chicago, Ill., pipe coupling.
Bergessen, Bendix G., Chicago, Ill., lady's work-table.
Coppock, Irwin, Barelay, Kan., weather strip.
Mears, Chicago, Ill., wood-cutting machine.
Gates, Philetus, assigner to Gates & Seoville.
Iron Works, Chicago, Ill., stone-breaking machine.
Graham, John, Chicago, Ill., water faucet.
McVay, Jas. H., South Chicago, Ill., window screen.
Perkins, Willis J., Grand Rapids, Mich., shingle-sawing machine.
Riley, Philip, Sr., assignor of one-half to P. Disbrow, Marion, Ia., fence-post.

Trimmings and Shavings.

Paper veneers are to be made in a factory at Sandwich, Mass.

The queen of England owns considerable real estate in the city of New York.

A very good artificial stone is made by mixing slaked lime and sand together.

John J. Astor has just paid $1,000,000 for the Guaranty building, on Broadway, New York.

The Aurora Building and Loan Association has a membership of ninety, and it is increasing.

The library building to be built by H. W. Sage and presented to West Bay City, Michigan, will be three stories high and cost $20,000.

A new building now in process of construction in New York has a cellar which will alone cost, below the first floor beams, about $430,000.

To raise a number to any power desired, multiply the logarithm of the number by the exponent of that power and the product will be the logarithm of the power required.

The inspector of the Bureau of Buildings in New York has directed examiners to visit the hotels as quickly as possible and report concerning the safety of the buildings.

Mr. DePauw and his extensive glass works find in Senators Vorhees and Harrison firm and active friends, and the probabilities are that his "infant industry" will be profitably protected.

A well known carpenter and builder of St. Louis is one of the heirs to $33,000,000 now held in trust for the heirs by the German government. When the division is made each heir will receive about $75,000.

Last year was bad on fire insurance companies. They paid out over $50,000,000. If the burning keeps on during the whole of 1883 as it has done during the last three weeks, they will lose three times that much.

The Racine *Journal* prints a list of buildings erected in that city in 1882, the estimated value of which is $1,000,000. The prospect is that even a larger sum will be expended for new buildings during the present year.

Real estate rules very high in the City of Mexico. A building on the Cinoe de Mayo street that was sold a few months since for $40,000 has just fetched $85,000. It will be used for a permanent bazaar of French manufactures.

Works of art purchased in Europe for the Cincinnati art museum at a cost of $20,000 have been received at their destination and are exciting the enthusiasm of the natives who have thus far been favored with a view of them.

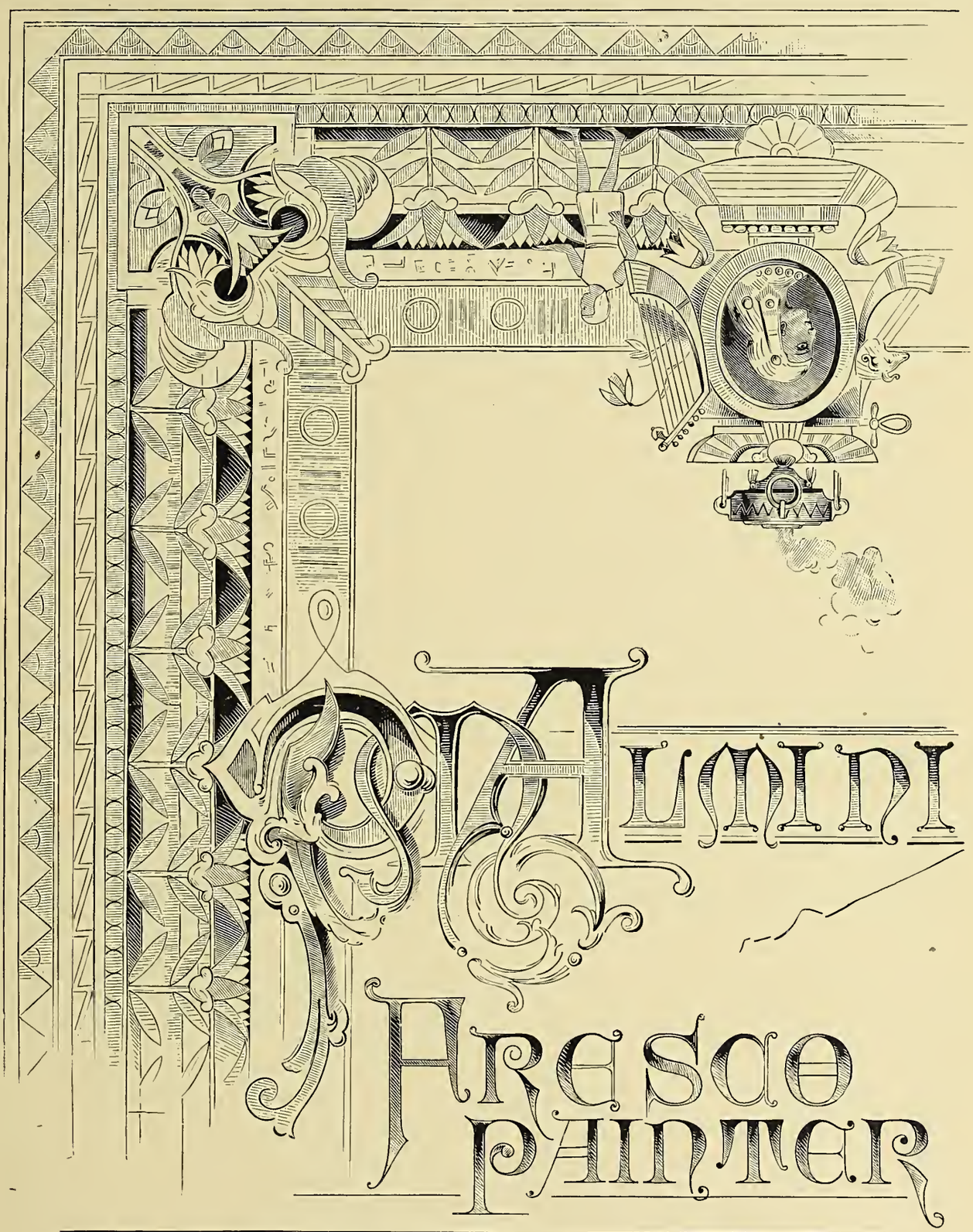
The latest wrinkle of fashionable architecture is a sitting-room exclusively for the daughters of the family. It is thought to foster a love for domestic life and furnishes a retreat where solitude can be found for study, music and painting.

A citizen of Des Moines has secured an injunction against a municipal loan of $70,000 with which to pay for the new city buildings, on the ground that the city debt of $700,000 already exceeds the constitutional limit of five per cent on the taxable property.

The latest addition to the British Museum is Nebuchadnezzar's door-step, careful examination of which shows certain marks of wear which indicate that Neb's daughter had a young man. Human nature doesn't change much, though years roll on.—*Boston Post.*

According to a recent return, there are 1,457 theatres in Europe. Italy heads the list, 348, next comes France with 337, Germany 194, Spain 160, Great Britian 150, Austria and Hungary 132, Russia 44, Belgium 34, Holland 22, Switzerland 20, Sweden and Norway 18, Portugal 16, Denmark 10, and Greece 4 each.

The most notable piece of furniture in General Grant's house in New York is a carved oaken cabinet in the library on the first floor, which contains a variety of presents received by the illustrious soldier during the last twenty years. One of its shelves is laden with gold-headed canes, suitably inscribed; another with little caskets inclosing the freedom of several European cities; a third with curious meerschaum pipes and other knickknacks. So liable has the general been to give a guest some souvenir from his collection that Mrs. Grant recently locked the cabinet and hid the key.


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Building Permits.

The following is a complete list of new buildings for which permits have been granted since February 1st:

Feb. 1. Mrs. Mary Sullivan, one-story brick cottage, 20x24, Eavett, near Polk street ..... $ 700
F. C. Heath, three-story brick flats, 27x60x40, 2808 S. Park avenue. 7,000
Aug. Hernowski, one-story brick cottage, 20x36, 80 Hastings street 1,000
Feb. 3. Chas. Bopp, three-story and basement brick store and flat, 24x70x46 30 Indiana street 9,000
Feb. 6. J. P. Enyert, one-story brick addition, 18x16, 805 Lake street 400
Feb. 8. Mrs. B. Naghton, three-story brick dwelling, 125x60x44, Loomis and Congress streets 32,000
Feb. 9. M. L. Langrauss, one-story brick cottage, 20x18, 1063 Oakley street 1,000
G. Hafner, three-story brick flats, 22x60x44, 220 N. Wells street.... 4,500
J. Hofner, two-story brick flats, 21x40x25, 10 O'Brien street..... 2,400
Feb. 10. Schille & Cossmann, four-story and basement brick store, 40x90, Matten and Clinton streets 17,000
James Youldan, two-story and basement brick flats, 22x40x32, 150 Cornelia street 2,500
Geo. Hensen, three-story brick store and dwelling, 21x50x32, 1462 Lake street 2,500
Geo. Patter, one-story brick cottage, 22x40, Park avenue near North avenue 1,000
W. D. Kerfoot & Co., agents, ten one-story brick cottages, 20x50x24, Rice near Robery street 18,000
Feb. 12. John Hess, one-story brick cottage, 20x44, 781 17th street 1,000
Catharine Dowing, two-story and basement brick store and dwelling, 25x40x31, 414 Taylor street 4,500
John Jehnert, one-story brick cottage, 20x34, 698 Chicago avenue. 1,000
Theodore Kaiser, two-story brick dwelling, 22x50, 3012 Emerald street 3,600
Ricke & Hibbard, three-story and basement brick stores and flats, 110x60x50, Larrabee and Center streets 25,000
F. D. Reynolds, four two-story brick dwellings, 66x48x30, 3814-3819 Johnson Place 9,000
Feb. 13. Oliver Tremain, two-story and basement brick flats and shed, 22x44x30, 247 Loomis street ..... ——
S. Pokorny, one-story brick addition, 20x8, 717 18th street 200
Henry Delaney, two-story and basement brick dwelling, 24x50x29, 2819 Cottage Grove avenue 5,000
John Gerson, two-story, basement and attic dwelling, 22x90x40, 564 N. Ashland avenue 7,000
Feb. 15. Jno. Dusig, one-story brick cottage, 20x50, 720 Allport street 1,600
F. Brockosky, one-story brick cottage, 20x40, 28 Zion Place..... 1,000
W. Halleck, one-story brick cottage, 21x42, Walnut street near Parker 1,700
L. D. Dickerson, one-story brick cottage, 20x40, 330 Hermitage avenue 1,000
Streeter & Tucker, two-story brick flats, 22x58x30, 89 Laflin street. 4,600
M. W. Eilers, one-story brick cottage, 22x42, 13th street near Leavitt 1,500
Feb. 16. M. Fraznik, three-story and basement brick stores and flats, 24x 70x48, 176 W. 12th street 6,700
J. W. Norak, three-story brick flats, 22x62, 151 Bunker street..... 5,200
J. P. Vaughan, one-story brick cottage, 21x32, 2653 Wentworth street 600
Feb. 17. C. R. O'Connell, frame dwelling, 40x50, 91-93 Gurley street ..... ——
Mr. Genzler, —— story and basement brick dwelling, 20x45, 9 Kramer street 1,500
F. A. Hibbard, two-story and basement brick dwelling, 21x51x32, 28 Egan avenue 5,000
R. W. Dunham, three two-story and basement brick dwellings, 60x54x32, 3905-3909 Lake avenue 15,000
O. D. Wetherall, six two-story and basement brick dwellings, 125x54x32, 2933-2943 Prairie avenue 30,000
Excelsior Stone Company, one-story, basement and attic, brick boiler-room, 20x26, N. Halsted and Division streets..... 200
D. O'Connell, one-story brick addition, 23x10, 3454 Halsted street.. 700
M. McDermott, one-story brick addition, 22x8, 2603 Halsted street. 700
F. C. Volck, one-story brick barn, 20x26, 145 Dearborn avenue.... 600
Feb. 19. Henry Valk, two-story and basement brick store and dwelling, 26x75x36, Robey and Twenty-second streets..... 5,000
R. Roberts, one-story brick cottage, 22x27x13, Wilcox avenue..... 500
Kleinke & Heinrich, two-story and basement brick dwelling, 24x50x31, 18 N. Ashland avenue 7,000
M. Buckley, two-story and basement brick livery stable, 48x95x30, 132 Twenty-ninth street 12,000
M. J. Doyle, one-story brick cottage, 20x50, 19 Margret street..... 1,200
Feb. 20. J. A. Sackley, two-story brick dwelling, 21x40x30, 310 Walnut street 3,000
M. Linton, one-story brick cottage, 20x32, Park avenue near California 700

Mr. J. B. Sullivan, of J. B. Sullivan & Bro., is at New Orleans frescoing the new cotton exchange.

Mr. J. J. Lockwood, the Chicago agent, is taking some large orders for brick of the St. Louis Hydraulic Pressed Brick Company's make.

Sergeant John Cramer, of the Lake street force, is erecting a store and dwelling at a cost of $3,500. The plans and contract are in the hands of T. C. Goudie, the West Side building contractor.

W. L. B. Jenney, the architect, who has been delivering a free course of lectures at the Chicago University, will deliver the last of the series on Wednesday evening, the 28th inst. This will be a summing of the whole course. About sixty views will be used in illustration.

Electric light is becoming more popular every day, and the indications are that it will before long be supplied by underground wires if the city council will only give the permission to lay them. The Western Edison Company consider it only a question of time to reach this result.

The use of pressed brick as a solid and also a pleasing front to buildings, both private residences and public structures, is becoming quite general. The Philadelphia brick, with its deep red color and soft sandy surface, has been a favorite, but years of service have shown that the sandy surface is susceptible to dirt. A candidate for popular favor comes from St. Louis, where the clay is harder, and while it gives to the brick the desired color, a rich red, it also becomes hard and smooth. The product of the St. Louis Hydraulic Pressed Brick Company, as used in the First National Bank building and Montauk block of Chicago, is so well moulded and even in shade as to give to the face of the buildings a desirable uniformity of color.

Current Publications.

A History of Architecture in all Countries, from the earliest Times to the Present Day. By James Ferguson, D.C.L., F.R.S., M.R.A.S., Fellow Royal Inst. Brit. Architects, etc. In two volumes. S. E. Cassen, Boston, T. Y. Crowell & Co., N. Y., pp. 1,300. Price $14.

This comprehensive history of both ancient and modern architecture is now for the first time republished in this country and supplies a want hitherto existing in architectural literature. It not only treats of the various styles of architecture and the structures which have been built in conformity with them, but also gives a great deal of sound and healthy criticism of the principles which underlie the different schools of art and the results produced. There are over 1,000 illustrations, which add greatly to the value and attractiveness of the work. The American publishers deserve the highest praise for the service they have rendered to the architects and those interested in architecture by the republication of this excellent work at so reasonable a price, and it should meet with a ready sale.

Modern House Carpenter's Companion and Builders' Guide, being a handbook for workmen, etc., and a manual of reference for contractors and builders. By W. A. Sylvester, Boston. A. Williams & Co., 1882.

As this book contains an amount of valuable and interesting information it will recommend itself to carpenters and builders, and also by the brevity and practical character of its contents.

Sewer Gas and its Dangers; with an exposition of common defects in house drainage and practical information relating to their remedy. By George Preston Brown. Jansen, McClurg & Co., Chicago, 1881. Price $1.25.

This little book has already proved itself a valuable monitor and guide in the detection and alleviation of those evils so prevalent among us entailed by defects in the drainage and sanitary construction of houses. The author is the well known editor of the *Sanitary News*. It is issued in excellent form by the publishers.

periodicals.

The new sporting paper, of which Mr. T. Z. Cowles, formerly of the Chicago *Tribune*, is the principal editor, will be before the sporting world in about two weeks.

The American Architect and Building News of February 10 is, as usual, highly literary in its character. The third paper from the pen of M. G. Van Rensselaer, which is written from notes taken during a hasty trip from Bayreuth to Ratisbon, concludes a series which have been instructive and interesting.

The Builder and Woodworker for February is a very handsome number, and contains eight full-page illustrations, besides a number of smaller cuts. "The Dining-Room," the third paper of a series on simple ways and means for decorating the home, by Edward Dewson, architect, is an article of real literary merit, besides being full of practical suggestions.

The Furnisher, a new quarterly issued by E. E. Bast, is a journal devoted to the interest identical with its title. It contains fresh matter upon decorative subjects and is intended to fill the field long vacant in Chicago — that of an art journal. The first number contains, among other articles, a biographical sketch of Phillips Wonwerman, the painter, and also illustrates one of his paintings. The paper deserves a hearty support from the artist and furnishing world, which it seeks to benefit and of which it will strive to be a worthy exponent.

The new self-acting water-closet, introduced by Thos. Kelly & Bros., is a great improvement upon old methods. When the seat is occupied, a valve opens and the water flows into an iron tank directly above. When the pressure is removed the water comes down with considerable force, doing effective work, and it does not get out of order.

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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 2

MARCH, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

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L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

Letters containing the latest building news and gossip from St. Louis, St. Paul, Detroit, Cincinnati and other points will be a prominent feature, and correspondence is invited from architects and builders throughout the country.

The aim of this Journal is to become the medium of communication between those in whose interests it is published. Matters of news and valuable facts appropriate to this Journal will be promptly published and proper credit given.

THROUGH the courtesy of the author, we are enabled to give our readers in this number the first installment of a course of lectures on architecture, delivered at the University of Chicago during the past winter by W. L. B. Jenney, architect. These lectures evince careful research into the history of architecture, and a thorough scientific and practical knowledge of the art. The entire course will be published in monthly parts, and will form a most entertaining and valuable feature of this Journal. Looking at Chicago to-day, with her massive business and public structures and miles of costly residences, it is difficult to conceive of her primitive condition less than fifty years ago, as shown by the reminiscences of the veteran architect, J. M. Van Osdel, published in this issue, being the first installment of a series of papers on the "History of Chicago Architecture."

THE difference—it cannot be called a disagreement—which has arisen between the Chicago contractors and architects regarding specifications in contract articles, has lead to much comment, editorial and otherwise, by the daily press. The situation is wholly misunderstood. It is simply a question of how far in justice, as between man and man, should an architect hold arbitrative power regarding the decision of what constitutes a fulfilment of contract. The contractors who raise the question claim that the architect, being the agent of one party to the contract, cannot decide a disputed point, and ask that it be left to two or more disinterested parties chosen by those interested to decide. The architects and contractors of Chicago are too intelligent and practical to allow the difference to become a dispute, and now that the contractors have issued a printed revision of the contract papers, embodying their wished-for changes, it is probable the difference will be amicably settled.

THE idea of a trade union is a strong and wise one, when it means an association for the protection and advancement of trade interests; but when it becomes an arbitrary and heedless power, it is a destroyer of many of the interests that it should aid, and slowly, sometimes, but surely, always accomplishes its own destruction. This is the position of the bricklayers' association in Chicago to-day. With a hesitancy upon the part of owners in regard to building on account of a prospective decline of rents and other causes, they come forward with senseless and arbitrary demands which will only result in their own discomfiture. Each year this association has become stronger, and each year have they given less heed to the contractor,—their medium of communication between them and the architect and owner. This spring they not only make their demands for themselves but also for the stonemasons, demanding for every journeyman the wages last year paid to only first-class workmen,—$4 per day; this, instead of arranging a scale of prices by which each man could be paid according to his capabilities for performing his work. The contractors have made the bricklayers' association more than one fair offer, but they have refused them wherever they have clashed with their own wishes. When the contractors proposed the appointing of a conference committee of each association the bricklayers refused, saying they could not afford to keep a standing committee. Fortunately the question, like a brick wall, has two sides to it. The union that is powerful enough to say what price an owner, through the contractor, shall pay for his bricklaying, and can, at a moment's notice, deprive him of men to do his work, cannot compel the owner or contractor to engage them. If it came to a point where these tradesmen demanded more than could be conceded them, the owner would say, "I will not build this year"; and there is not a contractor in Chicago who could not afford to "shut up shop" and take no work for a year. And if no contracts were let, where would the bricklayers' union be? Like all mismanaged and unealculating concerns, it only sees its own side of the wall, and will probably only see when it is too late that it made a mistake. If they still persist in pursuing their arbitrary methods, there is no time so good as the present to show them their mistake, and that before the building season has advanced to where a strike or suspension of work would be disastrous. But owners need not fear having to take this extreme measure. The backbone of an unjust man is

always weak, and rather than risk a season of idleness after the past unusually hard winter, they will accept the contractors' perfectly fair and equitable scale of wages and avoid a strike.

THE recent fire in the Cambridge flats in New York has called forth many press comments and served to make those who inhabit this class of buildings more or less apprehensive. One rule applies not only to the flats that rise story after story a hundred and fifty feet, but to all buildings where human life is exposed should a fire occur, and that is, make them fire-proof. The owner will tell you: "My building is fire-proof." He probably means he has adopted one or two fire-proof features, like wire lath and plaster, with wooden joists and rafters. In the Cambridge the fire started in the basement, a defective flue probably, near the elevator shaft, and through it the flames reached the top of the building, a common occurrence of which the Newhall House fire was a forcible example. Owners should see that some fire-proof features are adopted in every building. If they cannot afford iron joists, beams, rafters, etc., filled in with hollow tile and everywhere protected with a fire-proof material, they should see that the wood be covered with fire-proof paint. Elevator shafts should be made of brick, and extend up through the roof like a large chimney, and be supplied with automatic iron doors that always remain shut until opened by the passing elevator. Because these precautions are disregarded the havoc of fire is no argument against the building of flats. Architects will plan them so that they will be safe as well as convenient, if owners will give them the necessary license to make them fire-proof.

IT is not the aim of this Journal to discuss questions of a political nature, but there are times when the action of those who represent a state, county or city, directly affects the interests of those professions it is our province to represent, and in such cases we cannot remain silent. It is because of the mode of procedure adopted by these public officers that to-day the majority of the public buildings of states, counties and cities are failures from every point of view. The following characteristic notice has been received by architects generally, and we reproduce it in full:

STATE OF COLORADO,
OFFICE OF THE BOARD OF CAPITOL MANAGERS,
DENVER, Colorado, March 10, 1883.

In pursuance of an act of the Fourth General Assembly of the State of Colorado, approved February 11, 1883, entitled "An act to provide for the erection of a State Capitol building at the City of Denver, and creating a Board of Managers therefor," plans and specifications for a Capitol building which, when erected, shall not cost to exceed one million of dollars, will be received by the Board of Managers of the Capitol Building until 12 o'clock meridian on the 9th day of May, 1883.

Drawings must consist of foundation plans, basement plans, which must be at least 16 feet between joists, and must extend at least 12 feet above the surface of the surrounding ground.

Second floor plan, said story not to be less than 20 feet between joists, third floor plan, roof plan, and section of same, longitudinal section, transverse section, front, rear, and end elevations, dome plan, giving section of same, and material used and method of construction from base to summit, also giving diameter or area of base, style of architecture and extreme elevation.

The foundation and basement of said building will be of stone. Must be constructed with especial regard to strength and durability. The facing and ornamentation of the superstructure, including cornices, pediments and balustrades, will be of stone. The length of said building must not exceed 300 feet; the breadth, height and general form must be in such proportion to its length as to constitute a symmetrical building.

Said building must contain the following rooms, and may contain such other rooms as convenience of symmetry require:

One hall for House of Representatives of appropriate dimensions to accommodate 100 members; also lobbies and galleries for same.
One hall for Senate, with lobbies and galleries of appropriate dimensions.
One room for President of Senate.
One room for Speaker of the House.
One room for Engrossing Committee of Senate.
One room for Enrolling Committee of Senate.
One room for Engrossing Committee of House.
One room for Enrolling Committee of the House, and not less than ten other appropriate committee rooms for Senate and House respectively.
Governor's reception and other apartments, four rooms.
Secretary of State, four rooms.
Auditor of State, four rooms.
Treasurer of State, four rooms.
Attorney General, three rooms.
Superintendent of Public Instruction, four rooms.
State Board of Land Commissioners, four rooms.
Adjutant General, three rooms.
State Library room, not less than 2,400 superficial feet.
State Librarian, one room.
Supreme Court room of appropriate dimensions.
One room for Supreme Court Library for not less than 40,000 volumes.
Ten private rooms for Judges, Clerk and Marshal of Court.
State Engineer, three rooms.
State Geologist Department, two rooms.
Agricultural Department, three rooms.
Department of Statistics, three rooms.

The laws of acoustics must be carefully observed, and the entire building be made as nearly as possible fire-proof.

Provisions must be made for elevators, water-closets, etc. The said Capitol building must contain such number of fire-proof vaults as may be necessary for the preservation of the books and papers of the various departments of the State Government. Provisions must be made for draining, heating, lighting and ventilating said building in the most approved manner. One wing of said building is to be immediately constructed containing not less than 9,000 superficial feet, or equivalent to a building 90x100 feet, and the person whose plans are accepted will be required to furnish working drawings for said wing, and as a compensation for said plans, specifications of entire building and working drawings of said wing, said person will be allowed one thousand dollars, and one and one-half per cent of the contract price of said wing. The plan which is accepted will be required in triplicate.

No compensation will be allowed for plans which are rejected.

The said Capitol building will be erected upon the summit of a plat of ground in the City of Denver, State of Colorado, known as Capitol Hill, with its principal facade to the west.

The drawings must be sent to the "Board of Capitol Managers, Denver," Colorado, and be endorsed "Plans for State Capitol Building," and must come under a nom de plume, the real name and address to be sent to the Board of Managers in a sealed envelope, marked "private," which will not be opened until after the award is made.

The material used in the entire building must be of the best quality, subject to the approval of the Board. The Board reserves the right to reject any and all plans.

For further information apply to Board of Managers. By order of the Board of Managers,
GEORGE T. CLARK, Secretary, P. O. Box 2291. JAMES B. GRANT, Chairman.

The citizens of the State of Colorado have our sympathies. They are about to spend a million, and probably much more, in a way that is absolutely certain to end in vain regrets that they had not profited by the hundreds of prominent examples scattered over the United States. But a few years since Mr. Fergusson, a prominent and learned writer on architecture, remarked, "that it was safe to say that there was not a single public building in the United States that gave any evidence of having been the result of the serious thoughts of an educated practitioner." With the exception of some of the late custom-houses, entirely designed since the Mullett administration, the remarks of Mr. Fergusson are unfortunately still true, and will remain so as long as designs are obtained by gratuitous competition, of which the Colorado example is one of the worst on record. Why will committees launch into print such crude, ill-digested, ignorant and absurd, and above all most unfortunate and disastrous notices to architects? Why not take professional advice? There are hundreds of well-educated architects of long and valuable experience, that have not the least desire to compete for this State house. The services of one such man for two days, at the expense of one hundred dollars, would have been invaluable to the State of Colorado in drawing up that notice, always provided his advice had been followed.

We feel very safe in saying that there is not the slightest inducement for an architect in fair practice, who is honest and above reproach in all his dealings, to engage in this proposed competition. Examine the offer to the architects. The board reserves the right to reject any and all designs without a cent of compensation to any one. It can naturally be inferred that the board proposes to decide upon the merits of the designs. What evidence is there that they know anything of architecture? Can we not, judging from the past, feel assured that they do not know even enough to feel the necessity of professional advice? Can this committee be aware that competitive designs of the character they demand without any guarantee on their part of even fair treatment, cost the architect about $1,000 a set in office expenses alone, without counting his own time? Unless designs are showily and carefully finished they will attract no attention in such a competition, and we speak from actual knowledge when we estimate the price at which architects must enter this lottery with any hope of success to be $1,000 per ticket.

What is the compensation offered? The successful

man, if any, will receive about one-sixth the regular fees, or scarcely enough to pay his office expenses, to wit: For general drawings and specifications of a building to cost not less than $1,000,000, with two extra copies of the designs, $1,000; 1½ per cent commission on one wing to cost, suppose, $300,000, $4,500—total, $5,500. The regular fees upon which all architects in good standing insist, unless perhaps when the building is a gift for purely charitable purposes, in which the architect is personally interested, are 5 per cent on $1,000,000, $50,000. No charge would probably be demanded for the two extra copies of designs, as they can be cheaply reproduced by the blue process. As but one wing is to be erected the fees would be 2½ per cent for general drawings and specifications on $1,000,000, $25,000, and 2½ per cent additional for the details and supervision of the $300,000 wing, $7,500—total, $32,500. Instead of $32,500, to which the architect would be justly entitled if called upon in the regular order of business, he is to take his chances with any number of others in the most demoralizing and objectionable of all lotteries, pay $1,000 for his ticket, and if successful to the full he will receive $5,500.

Who will enter such a competition? First, the boys or beginners in the profession that have their experience to learn at the expense of the clients. Second, the professional state-house and court-house architects that know how to do it. They have sundry little methods of worming their way into favorable notice, and later in making a good thing out of the job. The fee is of little consequence to them, they have other ways of obtaining compensation; the taxpayer will pay it all the same.

There is just one chance left for the committee to acquit themselves with some credit. To employ, at a fair compensation, two or three architects of first-class reputation to make preliminary studies for the capitol, that they may have something with which to compare the numerous designs that will be presented under the call, and to accept no architect whose professional ability and character will not stand the closest and most scrutinizing examination. Then if nothing satisfactory is presented in competition the committee can select from the studies they have paid for.

History of Chicago Architecture.

PART I.

RECOLLECTIONS OF JOHN M. VAN OSDEL, ARCHITECT.

THE pioneer architect of Chicago, John M. Van Osdel, became acquainted with William B. Ogden in New York city in the fall of 1836, and furnished him with plans for a dwelling-house to be erected in Chicago, and agreed to personally superintend its erection. The sash for this building were made and glazed in New York; also all turning, carving, hand-rails for stairs, and other essential parts, were prepared and brought to this city early in the spring of 1837. Mr. Van Osdel arrived early in June of that year. Passing from the landing toward Mr. Ogden's office on Kinzie street, he noticed a block of three buildings, three stories high, the fronts of which had fallen outward, and laid prone upon the street. Upon inquiry he found that the frost of the preceding winter had penetrated to a great depth below the foundations, and the buildings having a south front, the sun acting upon the frozen quicksand under the south half of the block rendered it incapable of sustaining the weight of the building. At the same time, the rear, or north part of the block, being in shadow, the frozen ground thawed gradually, and continued to support the weight resting upon it. The consequence was that the block careened. The front settled fourteen inches more than the rear, making all the floors fourteen inches out of level from front to rear. This movement pressed the upper part of the front wall outward beyond its center of gravity, and it fell to the ground. The rear wall inclined inward twelve inches, but, resting against the party walls and floors, remained intact. Mr. Van Osdel's first work in Chicago was to readjust the floors in this block, which, at first designed for stores, was completed for dwelling-houses.

The brick buildings in the city in the spring of 1837 were the Lake House, on the southeast corner of Rush and Michigan streets, a building about 80x100 feet, four stories high; the St. James Church, a pretentious semi-Gothic structure, with a square brick tower, located on Cass, between Michigan and Illinois streets; William Norton, who built the first bridge across the river at Dearborn street, had a two-story brick residence on Indiana near Dearborn street; there were two stores, two stories high, on North Water street near the foot of Cass street. These, with the frontless block first mentioned, included all the brick structures in the North Division of the city. There were but two brick buildings in the West Division, one a two-story dwelling, corner of Jackson and Canal streets, owned by Lafromboi, an Indian chief; the other was Archibald Clyborne's residence, in the extreme northwest corner of the city. In the South Division was the court-house, on the northeast corner of the public square, having a basement and principal story, dimensions about 30x60 feet, the court-room and jury-rooms on the principal floor, clerk and recorder's offices and vaults in the basement; front ornamented with a four-column Doric portico of woodwork.

On the opposite corner, where the Sherman House now stands, was the City Hotel, built and owned by F. C. Sherman; its dimensions were about 80x100 feet, three stories high. The City Council had its chamber in this building. Immediately north of the City Hotel, on Clark street, was a two-story building occupied by Peter Pruyn, afterward used for the post-office. The "saloon building," southeast corner of Lake and Clark streets, was about eighty feet square, four stories high. It was discovered after the roof was put on that there were no chimney-tops, and not a flue in the building, and they were constructed afterward inside the walls as they were needed. There was a three-story building on the southwest corner of South Water and La Salle streets, used by the State Bank of Illinois; also a three-story dwelling, southwest corner of Wells and Randolph streets, owned and occupied by Charles Chapman, and a two-story dwelling, southwest corner of La Salle and Washington streets, owned and occupied by P. F. W. Peck. The foregoing comprises all the brick buildings in the city in the spring of 1837. The principal builders at that time were A. D. Taylor, Azel Peck, Alexander Loyd, Peter L. Updike, Charles Lowber, Asbel Steele, F. C. Sherman, Alson S. Sherman and William Worthingham. But two of these, A. D. Taylor and A. S. Sherman, are now living.

It may be of interest to notice that the scarcity of joists and scantlings induced Mr. Ogden to purchase of A. D. Taylor a large quantity of hewn timber, out of which the joists and scantlings were whip-sawed for his residence. A Mr. Pitts did a large amount of whip-sawing at that time, but the rapid increase of saw-mills in Michigan soon made the whip-sawing business a thing of the past.

Decoration in America.

LOUIS J. MILLET.

PAPER II.

THE artistic means which the decorator disposes of in our day are practically without limit. The total absence of what might be called a creed in art gives a freedom of conception of which we think no other period in the history of art could tell.

In the Gothic days, and even in the time of the Renaissance, which was merely a reaction against Gothic law, chateans were decorated not only with unity of spirit, as it is well they should be, but with almost absolute sameness of design; and the culmination of this tendency toward exclusiveness which occurred at the decline of the

Renaissance illustrates the danger of an all-powerful and accepted creed, for art is a religion, with its beliefs and ideal aims, hopes, and even superstitions. In a religion where we put into practice laws imposed on us, without having the knowledge of what led to the establishment of such laws, our minds are rapidly narrowed and we readily misinterpret the meaning and aim of religion, and may even be guilty of trespassing unconsciously. Thus it is with art. When a creed is accepted and the rules which it supplies put into practice, without the knowledge of those laws of nature or taste of which they are but a logical result, the inventive powers are reduced to a formula, and as a result art declines very rapidly.

All laws in art, we have said, are deduced from laws of nature, and in the fine arts this is very evident, except, possibly, in the case of music.

Thus in the composition of a picture, form and attitude and expression are suggested to us by nature, and that which emanates from the artist is merely the arrangement and execution of what he has before his eyes.

In architecture, beauty of form is dictated by laws of equilibrium. Thus, if we build something which to the eye seems out of equilibrium, or against the laws of gravitation, although by some unseen appliance we have made the building perfectly secure, we are guilty of an untruth, which in the religion of art is an irremediable sin.

Thus a system of laws have been wrought by time to oppose such sins. But those who do not understand the philosophy of such creeds are liable to many errors. Thus do we continually hear it said that any imitation in decoration is unlawful—that is, for instance, that we are not to imitate marble on a plaster surface, etc. This is partly untrue, for imitation is only forbidden where the use of the material imitated would be either illogical or impossible. We are therefore in a better way if we have no creed in art and merely go to the fountain-heads of nature for our guidance.

Viollet-le-duc, the most learned architect of modern times, proved beyond a doubt that the same rational feeling which prompted the Gothic compositions were the same which had created the Greek temples; and these two arts, so different in their forms, are certainly more like one another than any other two, possibly on account of the sameness of reasoning with which the artists of both periods proceeded.

We are at present in full revolution, and nothing shows it more plainly than our expression of interior decoration. We are pleased to treat each room of a dwelling with an entirely different ornamentation. We decide that this apartment will be Moorish design; the one next to it will be in Gothic; the further one in Renaissance—losing sight of the important fact that there is a sentiment of unity which is natural in us and without which we can obtain no more power of effect than a gathering of men can be powerful if disunited; and therefore the unity which should exist in the different decorations of a same apartment should exist, although to a somewhat lesser degree, throughout a dwelling. Then, when guided by this feeling, we may safely make each apartment of a different style and still a certain harmony common to the study of all these styles will pervade and give cohesion to the whole.

This will be the exact medium between our present radical ideas and the conservatism of exclusivism of the Gothic and Renaissance.

The Burlington Offices.

THE new office building of the Chicago, Burlington & Quincy railway was designed in its entirety by Messrs. Burnham & Root, and from the beginning of the foundation plan to the design of the massive entrance gates is an architectural credit to its designers.

The building suggests a type of Florentine Romanesque, although the details are essentially modern. The walls are constructed of St. Louis pressed brick, with brick ornamentation and a cornice and frieze of terra-cotta, the windows having unusually deep and heavily molded jambs. The basement is of bush-hammered Bedford limestone, heavily battered at the bottom, giving a solid and adequate base to the unusually massive superstructure. The sixth story is included within the height of the cornice. Above the cornice is an unusually high parapet wall, giving to the building a very finely marked quality, producing a certain heaviness of effect such as will be remembered in the Strozzi palace. Generally speaking, the building seems designed, too, as a suitable architectural expression of a great and stable railway corporation, the fullest attention being given to those elements giving expression to such a purpose.

The general plan of the building is that of a quadrangle built with a court which is covered by a skylight. This court is in the clear, independent of the two stairways, 55×75 feet, and around it are constructed galleries with wrought iron supports and railings connecting with the various offices which have the outer light from the streets and the inner light of the court. The supporting columns are of iron encased in fire-proof tile. There are two sets of staircases and three elevators. These are placed at either end of the court. The general character of the finish within is massive and simple, corresponding with the external features. The framing of the interior is not extraordinary, but still exceedingly well planned and substantial. The floor beams rest upon heavy iron compound girders thirty feet long, running from the court to walls in every case. One peculiarity of this building is that the large court is used as a central shaft to assist in the heating and ventilation of the offices. The cold air is introduced from without and driven by a fan to the indirect radiators where it is warmed, and then passes into the court and main offices. The sanitary arrangements are so perfect and so extensive as to equal those of our best private residences, a remarkable feature for an office building, and one of which the Burlington people are justly proud. The entrance, which is composed of square pillars of red granite, is guarded by two unusually massive wrought iron gates designed especially for this building, the execution of which is a remarkable example of wrought iron manipulation. The building is situated on the northeast corner of Adams and Franklin streets, and cost in the neighborhood of $350,000.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART I.

LADIES AND GENTLEMEN: In response to a very flattering invitation from your board of directors and your president, I propose a short course of popular lectures on the history of the different styles of architecture that have arisen, flourished and passed away, embracing the savage tribes, Egypt, Assyria, Greece, Rome and the Middle Ages.

Nearly every one at some time in his life is seriously interested in architecture. Most of the designs of the professional architect must be approved by the client before contracts are awarded, and in the case of the dwelling-house, the plans at least must be the joint production of the architect and his client.

The architect can alone design a convenient and elegant house — that might pass as such under the close examination of a committee of experts — and yet not be satisfactory to the person for whom designed, for every family has peculiarities, and an architect must have the assistance of those who are to occupy the house, or he cannot hope to satisfy them. This is demonstrated by the well established fact that when one purchases a house, however complete and elegant it may have seemed to the former owner, the new purchaser is not satisfied until he has made more or less alterations.

The study of architecture is not confined to the building


General offices C. B. & Q. R.R. Co.
Chicago

of the house, but extends to the furnishing and decoration, and I shall try to make these few lectures of some practical benefit the next time you furnish or decorate a room.

A person that can select the furniture, rugs, carpets, paper-hangings and the coloring of the painting, and produce a beautiful, harmonious room, must find much more enjoyment in the use of it than if it had been trusted to others. Unless some one mind directs the whole embellishing, there is sure to be a want of harmony that is often very disagreeable.

Harmony, taste, style, are a part of architecture, and a great point has been gained when one can correctly decide what is in good taste and what is not, entirely independent of fashion. For although fashion exercises almost despotic sway in matters of dress, ready-made furniture, etc., that extends even to architecture — as, for example, the fashion for what is called "Queen Anne" to-day — still, no person of refinement will allow himself to be influenced by fashion beyond the limits of good taste.

Architecture is the visible and lasting "history of civilization."

The many styles that have existed at different epochs and in different localities grew out of the requirements of the religion, climate, habits of the people, civil customs, and the character of the available building materials.

A knowledge of the architecture of a country at any epoch is a knowledge of the people, of the religion and of the government of that country at that epoch, and is of interest and benefit to the traveler, to the student of history, and to all persons of a liberal education, as well as to those practicing architecture as a profession.

We will see as we pass in review the numerous styles that have obtained the influence, more or less important, of the conditions of the environment. In most styles, the most powerful influence has been the requirements of religion and the power of the priesthood.

In Egypt we find the pyramids, the most enduring of all architecture, invented for the preservation of the mummy, for, according to the then existing belief, if the mummy should be preserved for 3000 years the spirit that left it after death would then return and dwell therein in happiness forever after.

At a later period the power of the priesthood had grown to mammoth proportions; even kings were high priests. Then they built those great temples, as at Karnac, Sudor and Ipsamboul, that to-day, with all our knowledge and all our science, excite our admiration and our wonder.

Beside the environment there is another very powerful influence governing architecture, namely, the ethnological character of the people.

This influence underlies all others, and is of so much importance that the history of architecture cannot be understood without some knowledge of ethnology; and I would therefore, by permission, hastily review some of the leading features most interesting to us, for which I am largely indebted to Fergusson.

Ethnology takes up the world's history where geology leaves it, and, following the same line of argument, strives to reduce to a scientific arrangement the apparent chaos of facts.

It is only within the present century that geology has been reduced to a true science, natural causes replacing convulsions. This is largely due to the efforts of Sir Charles Lyle. The material that lay scattered over the face of the earth has now been scientifically classified, this classification being based largely upon the fossils contained in the different formations.

Ethnology occupies the same relative position in the history of architecture that the fossils do in geology.

In ethnology, race has succeeded race. All have been disturbed, some obliterated, but no race has existed without leaving its mark. Sometimes by buildings or other works, sometimes by their influence on the arts, and sometimes by their influence on the language.

Formerly the study of ethnology was based upon philology, but it is now generally admitted that language alone is insufficient, and that architecture is an important adjunct.

Archæology bears the same relations to ethnology that paleontology does to geology. The buildings are the fossils of history.

The earliest work of man of which any record remains, are the pyramids, the oldest built some thirty-five hundred years before Christ. At this period the several primitive races of mankind had acquired their distinctive characteristics.

On the walls of the tombs of Beni Hasson, on the Nile, of date about 2500 B.C., are historical pictures descriptive of the wars of the Egyptians, in which the different races are portrayed with an exactitude sufficient for the illustrations of a modern work on ethnology, a use to which they have been put.

The history of architecture is a part of the world's history. In the buildings we can read the feelings and aspirations of those who erected them, and through their arts we can trace the relations of the races to each other.

The four great building races of the ancient world were the Turanians, Semities, Celts and Aryans.

The Semitics were from western Asia and northern Africa; the other three successively occupied most of Europe.

The Turanians were of the Polished Stone age. In the old world the typical Turanians were the Egyptians, in the modern the Chinese and Japs. The Turanians are the oldest people of which we have any knowledge as builders. They inhabited the valley of the Euphrates and the Tigris before the Semitics. The oldest families in Europe were the Pelasgi and Etruscans.

Such outcroppings as the Magyars and Fins are Turanians, as are also the Esquimaux, unless the latter belong to the Rude Stone age. They were always overpowered by the Aryans, the people of the Iron age. In religion the Turanians were idolaters; they worshiped the sun, the moon and the stars, trees and serpents, and even the bull. With them originated religious pilgrimages and human sacrifice.

This tree and serpent worship can be traced from Ceylon to Sweden. Their tombs and tumuli exist everywhere. Their ancestral worship is the foundation of many of the creeds of the world. Most of the Turanians to-day are Buddhists.

The only government known to the Turanians was absolute despotism, without any hereditary nobility;— every office except the throne always open to the ambitious. They never advanced beyond the rudiments of a literature. They recorded with pride the annals of their ancestors. These were written in hieroglyphics, signs or symbols, for none of the greater groups of Turanians ever appreciated the value of an alphabet.

In the arts, however, they excelled. As architects they were unsurpassed, and in Egypt alone have left monuments that excite the wonder of the world.

In India, Burmah and elsewhere they erected enormous buildings, highly enriched. And notwithstanding their low state of civilization, they have always shown much thought, ingenuity and good taste.

Owing to the fact that their gods were once kings on earth, their temples became great palaces, and their tombs were more sacred even than their temples, and are found wherever the Turanian race has existed.

They were very fond of color, which they used both internally and extensively. It was always brilliant and always harmonious.

They seem to have acquired the arts by instinct, for they made little progress. Their oldest work, even of the time of the pyramid builders, is often the best. The arts of the Turanians who inhabited the South of France about the glacial period, are identical with those of the Esquimaux of the present day.

TO BE CONTINUED.

A Rural Church.

THE subject of our illustration was designed by W. L. B. Jenney for the Episcopal congregation at Riverside, Ill. The cost, including construction, furniture and organ, will be $10,000. This small cost is secured by making it of the most rural character. The timbers are of common lumber, smooth dressed, painted in rich, dark

colors and filled in with rough rouble masonry. There are no small details of any description. The effect is produced by general forms and by color. The outside walls will be covered with vines and the grounds set with trees, flowers and shrubbery.

Lighting by Electricity.

BY PROF. A. A. GRIFFITH.

IT always takes time to bring the ideas of the scientists and the ideas of the general business public into agreement. The telegraph was for a long time the plaything of a few progressive electricians. A practical inventor adapted it to public use. For years it has been a public servant, and many have thought that there could be but little, if any improvement upon it. Now comes Prof. Elisha Gray with his "multiplex" improvement, and, behold, fifteen hundred words a minute are sent from Cleveland to New York. Thirty words a minute was thought an improvement and a blessing, and now fifteen hundred words a minute are surprising the business public, and causing them wake up to the possibilities of science and invention.

But Prof. Gray is not satisfied with this, and so he takes this material substance of man's invention,—this wire which carries the subtle fluid, this palace car in which electricity rides, and so extends, and puts a head upon it, that thought expressed in words by human lips comes and goes from friend to friend between Cleveland and New York, each hearing as well, and understanding as well, as if sitting together in the club-room engaged in an after-dinner discussion.

This is the greatest achievement of all, and does much toward making the nations as one family. From different points of the compass, as from different rooms in a great mansion, they shall greet and converse with each other, or join in praise and thanksgiving, as if around a common altar.

Electricity for lighting purposes has been declared a success; but it is not out of the hands of the electrical experts yet, and delivered over to the business public, who have only time to cry "more light," and who expect to be limited in their attention to the manner of its use,—to the striking of a match, or the turn of a switch. They, the general public, want to hear what the electrician has done, and are willing to pay well for what he invents for their use; but, they do not want him, or his assistants, too near when they "turn on the lights," as it looks too much as if the thing could not "go alone,"—was not "out of arms," as we say of children, and needed further watching. The majority have seen enough to satisfy them of the superiority of the electric light. The night is made into day, and there need be no dark places at any time, even in a great and crowded city—but the electric lighting systems require too much watching. We look for many improvements; for cheaper and better apparatus, and why not? We know what iron is worth, and brass, and copper, and wire, and we know what expert labor is worth, and the business public can make figures—it is their business. The apparatus should not cost so much. We look for a dynamo generator that will not heat or burn up, with an apparatus attached that will measure out the electricity as required, and allow the generator to take on or throw off power as demands for electric current are made upon it. We want lamps that will burn in circuit and take care of themselves, after electrodes are adjusted and globes cleaned. We demand better carbons.

The electric light has made a demand for light. More gas is used than before electric lights were introduced, and this reminds us, that when gas for lighting purposes was first introduced, of what a great cry was made against it on account of "the poison in the air," and the great expense,—but the "tallow dip" has disappeared. Gas light is a great convenience—it is always ready. It comes into our homes and places of business by unseen pipes, and ornamental chandeliers and brackets hold it for us, and its use requires of consumers no more thought or care than the raising of a curtain or opening of a shutter to admit the sunshine. We seldom think of the way it is made, or of its explosive and dangerous qualities. We know it has been brought under subjection. So some sun-browed scientist and inventor, seeing what is needed to adapt electricity for lighting purposes to general use, shall bring it under subjection, and a great advance will be made over systems now quite generally employed.

Electric light is manufactured sunlight; the elements from which it is made are all around us, and they cost nothing. Circuit wire, dynamo machines and safe appliances will soon, we trust, be ready for the public, and electric light, cheaper and better and more brilliant than gas, will come to light up our business houses, our streets and homes at night as the sun lights them by day.

Art Notes.

Bonnat, the French painter, is at work on a portrait of Minister Morton, which, it is said, will be his best work.

One of Mr. L. C. Earle's finest water-colors, "The Peddler's Visit," which was shown at the Art Institute recently, is now hung at Thurber's.

Mr. John Donoughue, the talented young sculptor, has gone east to sail on the Parthia for Europe about the first of April. He goes direct to Paris, where he will study his art. Mr. Donoughue will be absent five or six years.

At Breslau, the capital of Siberia, the churches are exceedingly interesting from sculptures in alto-relievo which ornament their walls and are fine specimens of art. One at the Kathhaus represents Satan wheeling his grandmother in a barrow.

At the Parisian Palais d'Industrie is a landscape executed in European and foreign insects. The foreground is composed of 45,000 coleoptera, the remainder of the picture being formed of over 4,000 varieties of the insect tribe, which supply every tone requisite for the landscape. The completion of the work occupied the artist four years.

The late Countess of Essex (Kitty Stephens) has by her will bequeathed to Mr. Henry Irving a most interesting relic. It is the original sketch in oils by Sir Joshua Reynolds for his famous "Prologue" portrait of David Garriek sitting at a table, hands together, with the thumbs raised and meeting each other; ruffles at wrists. The picture measures 24x18 inches and is in admirable preservation.

Special Correspondence.

DES MOINES.

Des Moines, March 9, 1883.

Editor of The Inland Architect and Builder:

Your first number is at hand, and here's our hand and a dollar. We sincerely hope you will receive the encouragement and meet with the success you deserve. Please do not make The Inland Architect and Builder too local in its character.

There is a wide field outside the great western metropolis which the Eastern journals do not and cannot fill, and which The Inland Architect and Builder can and should, and we have no doubt that not only architects, but the whole building fraternity of the great West, will gladly patronize and encourage a journal more especially devoted to Western interests, than any of those published in the East possibly can be. We only fear you have placed your subscription price too low to keep up the standard of excellence as shown in your initial number. The local papers of this city characterize the present activity in building as a *boom*, but the want of brick will delay many contemplated improvements until late in the season. It was estimated at the close of the last season, that we had about five million brick with which to commence the present season, but they were all sold in the winter to the early birds, and it is now claimed that there is not ten thousand of brick for sale in the city. Among the more important buildings already started are, the Grand Opera House, owned by B. S. Harding, estimated to cost $100,000; Des Moines National Bank building, to cost $20,000, Bell and Hackney architects; a block of three stores and offices, owned by Messrs. Mills & Weitz and Mrs. Mattes, to cost $30,000; improvements and rebuilding of Clapps Block, recently damaged by fire, to cost $30,000, Foster & Leibbie, architects; Aldine Building (offices) now finishing, cost $15,000; residence for J. W. Brown, cost $8,000; Block of 8 residences for J. W. Montgomery, cost $15,000; B. J. Bartlett & Son, architects.

There are not less than twenty-five or thirty other buildings costing from $3,000 to $15,000 or $20,000 each, either under contract or in the hands of our architects. Among the contemplated improvements are a Masonic Temple to cost $75,000, and an Episcopal church to cost $50,000.

B. J. Bartlett & Son, architects, have recently furnished the designs for a Baptist church at Marquette, Michigan, to be built of Marquette red sandstone and to cost $30,000.

De. Moin.

DETROIT.

Detroit, March 18, 1883.

Editor of the Inland Architect and Builder:

Detroit is now enjoying a building boom, and the craft are all very busy, and consequently happy. This is one of the most pleasantly situated cities in the world, and is becoming famous as a summer resort. Many eastern capitalists have built, and others contemplate erecting summer residences here. Your paper has been received by many of our architects and builders, and they all express themselves as well pleased with your first effort.

On the 1st inst. the work of tearing down and removing the various varieties of buildings, lean-tos and sheds so long known as the Michigan Central Depot in this city, began, and with the appearance of the workmen who were to do the work came a force of Polish women. How they knew that the work was to be done is immaterial, but the eagerness and endurance shown by them in getting their share of the débris was most interesting. A bit of scantling or a piece of board could hardly touch the ground before it was pounced upon, and while there was a scrambling rivalry, there were no quarrels or hard words between the women.

Occasionally both husband and wife would be seen working together, the man loading up a handcart and the woman making up a bundle which she would "pack" upon her back. It was no uncommon thing yesterday to see a woman with a bundle of boards and sticks, weighing from 100 to 125 pounds, upon her back, toiling along Third street and Congress street, and when it is remembered that most of these loads are lugged to the extreme northeastern part of the city, the extent of the labor will be appreciated.

What do they do with the scraps? They are used chiefly in the erection of houses. There are scores of houses—and some quite respectable in looks—made from scraps of boards and timber. One of the women at work yesterday told an attaché of the depot that she carried, a year ago, lumber scraps enough to build a house of three rooms, and that now she is getting together enough to put up a small barn.

NOTES.

March 2, the building formerly occupied by the Board of Trade, at the corner of Woodbridge and Shelby streets, was disposed of at auction, the limit being placed at $30,000, and the auctioneer being Patrick McGinnis. After numerous bids had been made, the sale was effected, Philo Parsons being the purchaser, and the price being $30,000. As a matter of interest, it may be added that the original cost of the property was $47,000, and that in an effort to sell the same building at auction two or three years ago, $32,050 was bid, but the final bid of $50 was made by a stockholder in an effort to push the figure still higher, but without success. Hence there was no sale.

It is rumored that L. L. Barbour and others contemplate erecting a mammoth hotel building on Griswold street, extending from Congress to Fort, a year hence.

The city attorney has submitted an ordinance providing for a board of building inspectors, to consist of the board of public works and the fire marshal. Referred to the committee on ordinances, and ordered printed.

With the new Third street depot, the new postoffice, T. A. Parker's new buildings, Messrs. Burns & Owen's new building, and an usually large number of dwelling houses, in process of erection next summer, contractors and builders, carpenters and masons, expect a profitable season.

Architects Donaldson and Meier, of this city, will begin remodeling the American House, Windsor, about April 1. It will be called the British-American.

William A. Butler will build a business block on the corner of Woodward avenue and Columbia street this spring. It will be brick, and three stories high.

The Eagle Iron Works on Woodbridge street west are being enlarged by the addition of two one-story rooms 40×50 and 30×40 feet in size.

An army of plasterers are making it lively in the new Campau block.

Architect Eidlitz made a hurried visit Saturday, the 13th inst., to this city. He has returned to New York to complete the drawings, etc., of the new depot.

Thomas W. Palmer, of this city, has associated himself with George D. Smith and Newcomb McGraft, of Muskegon, forming a company which will build a saw and shingle mill at Lakeside, near Muskegon.

Architect Eidlitz will return to Detroit next week.

Plans have been prepared for the erection of two three-story brick stores on the north side of Fort street, between Sixth and Seventh streets.

A standpipe and fire-escape is being erected on the alley side of the new Campau block.

The new passenger building at the Union depot was opened for business on the 1st of the month. It is probable that the Wabash railroad will soon run their passenger trains to that depot.

BUILDING PERMITS.

The following building permits were issued since the 1st of March:

Thomas Ridgeway, frame dwelling, No. 811 Beaubien street	$ 600
Phillip Letourneau, frame church, No. 572 Fourteenth avenue	1,200
Joseph Thiery, Jr., frame dwelling, No. 535 McDougall aveuue	700
Also, frame dwelling, Scott street	800
Also, frame dwelling, No. 211 Hale street	1,000
Caspar Bast, frame office, No. 59 Catharine street	475
John Hailey, frame dwelling, No. 314 Walnut street	900
Alex. Chapoton, four-story brick building, corner Michigan and Lafayette avenues	18,000
A. Ridley, frame truck barn, Howard street	3,800
A. C. Varney, double brick dwelling, Nos. 93 and 95 East Montealm street,	6,000
Also, double brick dwelling, No. 169 East Columbia street	7,000
Also, five-story brick chair factory, No. 106 West Congress street	21,000
Also, brick dwelling, East Willis avenue	7,000
Also, brick dwelling, West Willis avenue	6,800
Also, frame dwelling, Milwaukee avenue	1,000
Karl Reeske, frame dwelling, No. 185 Ontario street	800
Frank Fett, frame dwelling, Superior street	800
John Bloom, frame barn, No. 134 Fourteenth avenue	100
A. Augermeir, frame office, Eighteenth street	100
Nothheiler & Geiger, frame dwelling, No. 309 Myrtle street	500
Julius Bushkofski, frame dwelling and barn, No. 244 St. Joseph street	500
A. G. Hollands, brick dwelling, Forest avenue	4,000
Frank Howe, frame dwelling, No. 330 Porter street	600
Fred. Scheer, frame dwelling, No. 827 Chene street	300
H. J Hill & Co., frame dwelling, No. 691 Seventh street	800
John Shmitt, two frame dwellings, Nos. 824 and 826 Chene street	1,000
Jacob Sienuon, frame dwelling, No. 708 Howard street	600
H. E. Carpenter, frame dwelling and barn, Cass avenue	2,500
V. Hilsendegen, frame dwelling, No. 477 East Larned street	1,000
R. Roehm, two frame dwellings, Nos. 293 and 295 Williams avenue	1,000
Also, two frame dwellings, Nos. 316 and 318 Williams avenue	1,000
L. P. Littlefield, two frame dwellings, Sixteenth street	2,000
H. Marx, frame store and barn, No. 521 Baker street	2,050
H. Carew, brick barn, No. 31 Washington avenue	2,000
Fred. Schmidt, alterations to frame dwelling, No. 499 Chene street	100
A. C. Varney, addition to brick chair factory, corner Fourth and Porter streets	4,000
Frank Jenizenski, repair frame dwelling, No. 781 Hastings street	500
Henry Heames, improvements to frame dwelling, Lafayette place	400
Ellen P. Reeves, alterations to double brick dwelling, Nos. 501 and 503 Third avenue	500
George Zink, addition to frame dwelling, No. 519 St. Aubin avenue	800
John Shafer, addition to frame dwelling, No. 60 Maple street	600
Augustus Day, addition to brick building, corner State street and Park place	300
Total	$105,225

Mr. A. C. Varney has the following work in hand:

Block of stores and dwelling for Mr. Wm. A. Butler, corner of Woodward avenue and Columbia streeet	$20,000
Brick dwelling for Dr. Hiltom Williams, corner of Cass and Alexanderine avenue	11,000
Two brick dwellings, Mrs. W. B. True, Bayg strcet	18,000
One frame farm dwelling, Mrs. W. B. True, Grosse Point	3,000
Brick dwelling for Mr. Lapham, East Montealm street	7,000
Two brick dwellings for Mr. Berkery, Labroose street	6,000
Frame dwelling for A. G. Butler, Frankfort, Michigan	5,000
Alterations on M. J. Murphy & Co's chair works, corner Fourth and Porter streets	4,000
Total	$74,000

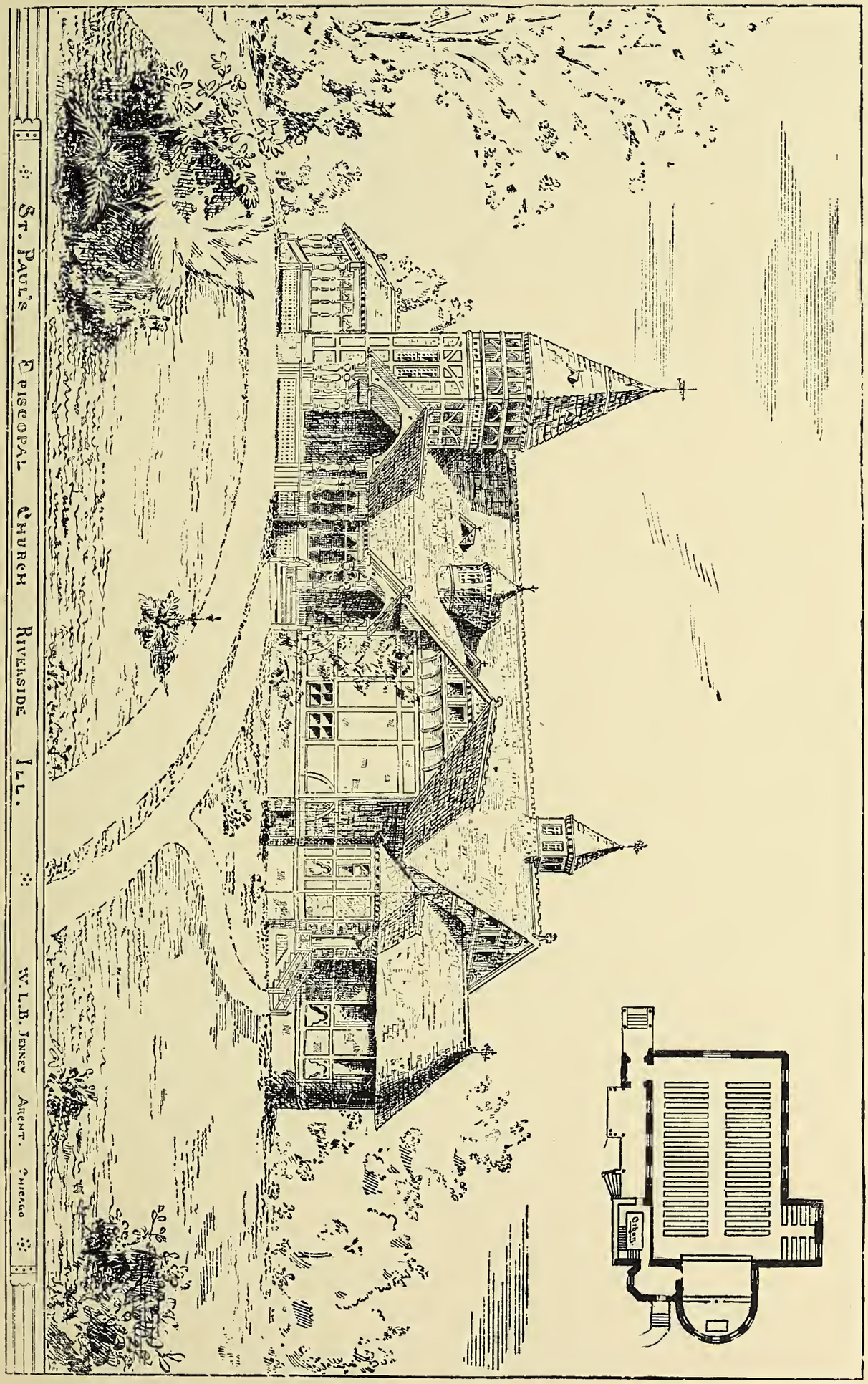
Builder.

CINCINNATI.

Cincinnati, March 17, 1883.

Editor of the Inland Architect and Builder:

I am possessed of so much news to chronicle for you this month that I hardly know where to begin; but all things must have a beginning, so I may as well start out by stating that the first number of your paper has been received, and a very fine number it is. Its appearance was a complete surprise to the profession at this point, and a lively interest has been manifested in its aims and purposes. Those architects and builders who received a sample copy, were very favorably impressed with the make-up and the general newsy character of its contents. I think I may, without any hesitation, promise you a large number of subscribers from this city within the next two months, and it is but a question of time when you will have us all. At present we are just recovering from the general depression, in all business circles, caused by the flood, and architects are so busy with plans for alterations, rebuilding and new structures, entailed to a great extent by that destroying element, that they have very little time to think of anything else. Nevertheless, they are well pleased with your


St. Paul's Episcopal Church Riverside Ill.
W. L. B. Jenney Archt. Chicago
Organ

paper and will contribute liberally toward its support — all in good time.

The annual meeting and election of the Mechanics' Institute were held in Greenwood Hall on the night of the 14th inst., with the usual exhibition of work by the pupils of the School of Design.

The exhibit consisted of drawings and work in plaster of Paris and modeling clay. The drawings of machinery and architecture were very creditable as a whole, and some of the specimens exhibited decided talent. Figure drawings formed a good feature of the display, and the plastic work was the best ever shown by the pupils of this school.

In the architectural department the following awards were made:

First Class — John H. Boll, G. H. Walker, Wm. Kloak, F. Krucker, first degree of merit; Ch. Dettrich, second degree of merit.

Second Class — Lousdale Green, C. A. Collman, first degree of merit: L. Lauer, R. Cordell, second degree of merit: Ernest Cordell, Aug. Maley, third degree of merit.

Third Class — L. L. Buchanan, H. F. Wulf, first degree of merit; G. Weideman, Thos. J. Steding, John Ausdenmore, second degree of merit; Howard S. Miller, third degree of merit.

SPECIAL AWARDS.

Wm. Kloak (third year), gold medal; F. G. Krueker (third year), honorable mention; John H. Boll (second year), silver medal; G. H. Walker (second year), honorable mention; Lousdale Green (first year), bronze medal; Chas. Dettrich (first year), honorable mention.

A general meeting of the members of the Builders' Exchange was held at their rooms on West Fourth street, February 24. It was the final gathering of their year, prior to the annual election of officers. There were over seventy members present, the largest number ever turning out at a meeting of the Exchange. The annual election was held March 5. Two tickets were in the field, "For Removal" and "Against Removal." The "Against Removal" fellows scooped in ninety-five per cent of the votes and are happy. After the election a lunch was set, to which the Exchange had invited the Architects of the city, the Tinners Union, the Boss German Bricklayers' Union and the press. The Exchange is booming. The membership is constantly on the increase, and sound financially, not owing a cent to anybody.

NOTES.

A large number of insecure buildings have been ordered torn down or made safe within thirty days during the month.

It is whispered that the "Cincinnati Maennerchor" intends to build, somewhere below the "Rhine," a large hall, on the principle of a stock company, the capital to be $250,000. The hall will contain a theater, large ball-room, billiard, reading, chess and special ladies' rooms.

The Emerys are going to build an eight-story office block on the sight of St. Paul's Episcopal church.

The Wilson Brick Machine Company, of this city, was incorporated at Columbus on the 20th ult.

The Gibson House, which has just been leased by a new company, will have an extensive addition built to it at an early date.

A large number of frame buildings in the Mill Creek valley, along Gest street, are built upon piles, and are fifteen or twenty feet above the ground. This is to avoid high water, but it did not answer during the late modest freshet. During the past week the water has been up, in and around these buildings, and in receding, unless they were firmly lashed to the piles, has in many cases floated them from their foundations.

The Springer Building and Loan Company, of this city, was incorporated at Columbus on the 24th ult.

Five hundred residences have been overturned or destroyed by the flood at New Albany, Indiana.

Of the newly-elected directors of the Builders' Exchange the following were present at the meeting for organization on the 7th inst.: President Livezey, James Finnegan, Robert Thoms, George H. Taylor, James Dale, J. C. Harwood, Dennis Flaherty, Henry Holtzinger, Charles Crapsey and Lawrence Mendenhall. Robert Thoms was elected treasurer, and John P. Pearce secretary and superintendent. To the latter a vote of thanks was passed for his efficient services. Mr. Finnegan, chairman of the Committee on Water and Light, reported that he had interviewed the chief of police on the subject of an order requiring the police to re-light such red lamps on obstructions as may become extinguished during the night, and received a reply that an order would not be issued, but that a request would. The president was, on motion, directed to appoint a committee on this same duty for the ensuing year. He was also authorized to close a contract for a renewal of lease on the present quarters for the ensuing year.

Damage by flood at New Albany, Ind., is estimated at $1,250,000. De Pauw's glassworks loss, $200,000. Many heads of families were without work all summer, and 2,100 families have been driven from their homes.

BUILDING PERMITS.

The following are permits issued since February 9, for houses, etc., to cost $2,000 and over:

The I.C.St.L.& C. Railroad, additional shed for new depot, 86×300, to be built of iron and to have Rendle's patent sky-light. Contract let to Mr. M. Clements	$20,000
C. R. Mabley & Co., four-story brick building	2,500
Samuel Kuhn, four three-story brick dwelling houses, Mr. Samuel Hannaford, architect	20,000
Frank Byers, stone front	2,500
C. Bassenhort, three-story brick dwelling	5,000
Lawrence Beck, three-story brick building	4,500
H. Quencel, two-story brick dwelling, Marshall avenue near Moulton street	2,500
Louis Stix & Co., seven-story brick warehouse, Vine street between Race and Elm streets	20,000
Mrs. L. Rover, four-story stone front store, Elm street near Fourteenth street	5,000
H. Weisgesber, three-story brick building, 71 York street	4,000
Geo. C. Winchel & Co., factory, corner of Bank and Riddle streets, 100×150, five stories high, Geo. Briuk, architect	40,000
J. S. Armstrong, two five-story stone fronts, north side of Third between Elm and Race	30,000
Jos. Tenhundfelt, three-story brick, west side of State avenue near Gest	3,000
J. H. Hilsmann, three-story brick, south side of Bank near Baymiller	4,000
Hy. Limburger, three-story brick, west side of Brown near McMicken avenue	4,000
J. C. Harrell, three-story brick, No. 292 Ninth street, between Mound and John	4,000
Mrs. Loe, alter and repair three-story brick, east side of Walnut between Court and Canal	2,500
Jacob Brown, rebuild and repair three-story brick, No. 50 Wilstach street	2,000
C. H. Stumpe, three-story brick, No. 52 West Mulberry	4,000
R. T. Pearce, three-story brick, northeast corner of Fifth and Lock	7,500
F. Rannebaum, three-and-one-half-story brick, east side of Clay between Twelfth and Canal	10,000
C. Webber's estate, two-story brick, north side Parker between Clifton and Ohio avenue	9,000
John Frunth, three-story brick, north side Buckeye between Oak and Main	6,000
A. Knorr, two-story brick, northwest corner Ohio and Parker	5,000
H. Kister, three-story brick dwelling, Bauk street	4,000
Anton Thurn, three-story brick dwelling	4,000
J. H. Banning, three-story brick dwelling, Baymiller street near Ninth street	3,500
John Jones, two-story frame, Western avenue near Spring street	2,000
Krebs Lithographing Co., brick building 50×100, five stories high, on Sycamore street, near Fifth street, Jas. W. McLaughlin, architect	30,000
Mrs. A. Duglo, two-story frame dwelling on Mt. Hope road, T. A. Richter, architect	4,500
J. B. Marling, frame dwelling at Norwood	6,000
Mr. J. H. Hart, eight-room frame dwelling, Price's Hill	4,000
Wm. Mitchell, three-story brick dwelling, north-east corner Fifth and Lock streets	7,500
A. Bunten, two-story brick dwelling, Liberty street	3,500
G. W. Rhusenson, two-story brick dwelling, Vine street	3,000
Wm. Wentsel, one-story brick dwelling, 462 Vine street	3,000
Jas. K. Hurin, four-story addition to mill, 643 West Sixth street, Chas. Crapsey, architect	3,000
Thos. McDougall, addition to frame dwelling, James avenue	3,000
David Sinton, five-story pressed brick store, 98×100, West Fourth street, Jas. W. McLaughlin, architect	30,000
Queen City Club, addition to club-house, corner Seventh and Elm streets, Samuel Hannaford, architect	10,000
J. H. Overbeck, two-story brick building, corner Hackberry and Sycamore streets	6,500
A. Barge, two-story frame dwelling, 1548 Eastern avenue	2,500

C. M. A.

ST. PAUL.

St. Paul, March, 19, 1883.

Editor of the Inland Architect and Builder:

The season upon which builders are about to embark promises to be more than an ordinarily busy one. The West hotel, the Chamber of Commerce building, U. S. Traders' block of French flats, the Arcade Hotel in the rear of the Syndicate block, the Sidle block, an addition to the Chute building, the Skiles & Lindley building, and possibly the erection of the Union Depot building, will absorb a large amount of labor and material, and conspicuously contribute to the magnitude of the season's operations. Many other valuable structures, the plans for which are not yet made public, are in the stage of incubation. We shall certainly do more in the building line through the coming summer than ever before in the history of this city.

Your paper came duly to hand and I congratulate you on its general excellence. It will certainly be a success and we will help you to make it so.

NOTES.

Hon. C. M. Loring will build a $35,000 residence in Mary place this spring.

N. K. Shepherd proposes to build a double stone residence on Ninth street, between Hennepin and Nicollet avenues.

J. E. Osborne will erect a three-story brick and stone block on Hennepin avenue, next to the Harrison building, some time during the season.

F. B. Long has finished the plans for a large packing establishment to build at Midway by Upham, Wyman & Co. The buildings will be under way shortly.

Messrs. Kees & Fisk are preparing plans for a $7,000 residence for Mr. Luke, of Grand Forks.

Architect Wirth has completed plans for a block of tenement houses to cost $10,000 and to be built upon the corner of Summit avenue and Wabasha. A portion of the block is to be used by the Baldwin school of Macalester college. Among other buildings by Wirth are:

A parochial schoolhouse for Rev. Kittson's church at the corner of Ashland avenue and Mackubin. $2,500.

Residence for Mr. Pingree on Ashland avenue near Mackubin, to cost $5,000.

First National bank building at Bismarck, Dakota, 75×130, three stories, to cost $50,000.

Row of six houses on Rondo street for J. G. Robertson, to cost $6,000.

Row of three houses on Western avenue, corner of Selby, for Dr. Owen, to cost $7,500.

A very important improvement is the remodeling of the Rogers block on Bridge square. The block will be rebuilt at a cost of $25,000; the plan is to convert it into a first-class apartment house, and the intention is to make it equal in interior arrangements to the very best style of French flats.

Architect Guager has the plans out for a three-story brick block, 50×75 feet, to be built on Bridge street, west side, for Bircher & M. G. McGrath, at a cost of $20,000. The second story will be made into a hall.

Guager also has plans for W. A. Naylor's new house on Selby avenue; cost $3,500.

Schroeder & Weyh will build a new carriage repository on Seventh street 50×60 feet, two stories, at a cost of $5,000.

Chaska is to have a new engine-house, to be built after plans drawn by Kees & Fisk.

There are very many Eastern capitalists in town, all seeking favorable investments. To this class H. S. Fairchild sold in one day: The corner of Ninth and St. Peter streets for $9,500; a lot on Rosabel street, between Fourth and Fifth, for $14,000; a lot on Fifth, corner of Neil, for $7,000; house and lot on De Bow street for $5,200; and a large number of smaller sales, making a total aggregate of over $50,000.

It is stated that Messrs. C. A. Pillsbury & Co. wish to purchase the site of the Croswell mill, on the East side, and, if successful, will build another elevator thereon for the Pillsbury A mill.

The contract has been let for the residence and barn, to be built at the corner of Laurel and Arundel avenues, for Gen. R. W. Johnston, at a cost of $14,000. C. H. Johnson is the architect.

The contract for the basement of Mr. Foster's new residence on Summit avenue has been let. The basement will cost $2,000.

Architect Johnson has prepared plans for several new houses to be built at Merriam park.

C. A. Reed has prepared the plans for the eight new houses to be built by Franklin Wheeler, Esq., of Bath, N. Y., on his lots recently purchased in Bryant's addition. The houses will be very pretty, and will cost about $2,500 each. It is stated that Mr. Wheeler intends to invest largely in St. Paul property and its improvement.

Watson & Rice will build a fine building for banking and real estate business, on the 27×79 feet purchased last week at the southeast corner of Jackson and Fifth streets, for $500 per front foot.

The residence of Commodore Kitson, one of our wealthy boat owners, is said to be the finest ever erected here. The interior is handsomely fitted in oak, mahogany, sycamore, cherry, etc. The woodwork carvings, etc., are furnished by Tomlinson & Carsley, of Chicago. A. M. Radcliff, of this city, is the architect.

St. Paul.

ST. LOUIS.

St. Louis, March 19, 1883.

Editor of the Inland Architect and Builder:

The fine weather still has its effect on those who are needing new buildings, and the architects are busy getting up plans and making arrangements for the erection of contemplated structures.

Plans for the construction of the new Northern Pacific Hospital, at Brainerd, have been completed, and work will begin thereon at once. The main building will be 40×120, and two stories high, with two wings, each 32×100. The style of architecture will be Gothic, and the premises to cost $25,000; will be completed and ready for occupation by the 1st of June, proximo.

The Board of Public Improvements on the 1st inst. awarded the contract for erecting additional buildings at the House of Refuge grounds, to Chas. Wehking, at $36,000.

The property adjoining St. Laborions' Catholic edifice, West Nineteenth and North Market streets, has been purchased by the church, and a fine new temple of prayer will be erected.

Among the building permits issued February 15 was one given to Messrs. Tutt & Louderman, to erect a brick building on the south side of Washington avenue, between Ninth and Tenth streets, to cost $133,600. A permit was also issued to B. W. Alexander to erect a $20,000 building on the west side of Fifth street, between Olive and Pine streets.

The Board of Public Improvements opened the bids for the erection of the new building at the House of Refuge grounds on the 24th ult. The bidders were: Charles Wehking, $36,500; Pat Mulcahey, $36,724; Gotlieb Nemmeister, $37,911; Bryan Brady, $38,000; Kerr & Allan, $39,900; J. P. Gollick, $40,500; Allen Bros., $40,500; Beckmeir & Beckman, $41,060. The building is to be three stories high, of brick and stone, 180×77 feet. It will be eighty feet north of the present building, and will front on Virginia avenue when that street is opened through the grounds. The bids will be referred to the joint committee on Ways and Means of the Assembly, which will canvass them and award the contract to the lowest bidder.

Since the purchase of the property and recording of a deed of trust thereon, nothing has been done toward the erection of the monster hotel on Grand avenue, but the projectors give assurance that the public will not have a great while to wait for some active movements toward construction.

The latest big project, which is as yet discussed by a comparatively limited circle, but which will soon be given to the public with some definite shape, is the erection of a large hotel on the site of Uhrig's cave, this being regarded as a site peculiarly advantageous for a hotel on the "flat" system, being convenient to so many railroads, and almost on the dividing line between the business region and the fashionable residence district.

John Curtis is putting up a $4,000 brick building on North Market street, between Jefferson avenue and Twentieth street.

Mr. Charles K. Ramsey was somewhat surprised on the evening of the 2d inst., to find his residence, 2924 Dickson street, invaded by a party of friends. Agreeable to the request of Mr. William Mullen, the host and his guests assembled in a side room, where a costly silver service of thirteen pieces was displayed. Mr. Mullen then explained that the silverware was presented to Mr. Ramsey by the contractors of the Kraft-Holmes building, as a token of their esteem and an acknowledgment of the architect's ability. Mr. Ramsey acknowledged the compliment in a few fitting words, and an hour was then spent in social intercourse.

Each piece of the service is marked with the monogram "C. K. R." Around the salver are engraved the names of the donors—McBride & Julian, Milburn & Rich, Pickle & Bros., Scherpe & Koken, John M. Sellers, Mullen & Hoppies, William Clark, Black & Davis, Riddle, Rehbein & Co., Smith, Beggs & Rankin, Cochran & Powers, and Voris, Norton & Co.

The set is probably the most complete in all respects ever presented to any one in this city, and was the special design of the Mermod & Jaccard Jewelry Co. The magnificent tropical foliage with which the service is decorated is marvelously beautiful and unique, and is another evidence of the great taste and skill of this house in getting up presents.

The historic old mansion on the southwest corner of Olive and Ninth is to be removed, to make room for a row of stone-front stores, to cost $80,000. The proprietor, Mr. James D. Lucas, of Pevely, Mo., has given out contracts for a four-story stone-front building 120 feet by 109 feet in depth. The ground-floor will be used for stores and the upper part divided into offices, so that at any time the building may be converted into a first-class hotel.

The following building permits have been issued since February 24, structures to cost $2,000 and over:

Producers' Marble Company, brick addition to marble house on Eleventh street, between Spruce street and Clark avenue	$ 2,000
Peter Wandell, brick dwelling on Seventh street, between Shenandoah and Lami streets	2,500
Tonndorf & Kuhns, brick picture gallery on Olive street, between Fifteenth and Sixteenth streets	3,000
Peter Huhn, brick store and dwelling on Lafayette street, between Second Carondelet avenue and Preston place	5,000
Mrs. David Horne, brick dwelling on Warren street, between Eighteenth and Nineteenth streets	2,700

Philip Spiegel, brick dwelling on Sidney street, between Second Caron-delet avenue and State street	$ 2,900
A. F. Blong, three adjacent brick dwellings on Morgan street, between Jefferson avenue and Beaumont street	7,000
Daniel Shine, brick dwelling on Finney avenue, between Grand and Van-deventer avenues	3,000
Fred. Kraumer, brick dwelling on Montgomery street, between Nine-teenth and Twentieth streets	1,300
Mrs. Yost, brick dwelling on Jackson street, between Greyer and Lafay-ette avenues	3,500
Rev. James McCaffrey, brick parochial residence on Sixth street, between Biddle and O'Fallen streets	10,000
J. C. Brockmeier, brick shop on Arsenal street, between California and Oregon avenues	2,000
Wm. C. Schultz, two adjacent brick dwellings on Rauschenbauch street, between Dodier and Sullivan	6,000
Martin Steitz, two adjacent brick dwellings on Eleventh street, between Salisbury and Farrar streets	15,000
Dutro Car-Wheel Company, iron-clad shop on Cabanne street, near Pacific railroad	3,000
Hugh McCoy, two adjacent brick dwellings on Channing avenue, between Market and Laclede avenues	3,500

In closing I wish to say a favorable word for the first number of The Inland Architect and Builder. Those of us who have received a copy are very much pleased with its general excellence, and we hope you will keep it up to the promise of its first number.

E. L.

Long-Leafed Yellow Pine.

SOUTHERN pine lumber is becoming each year more popular in the northern market, and as the demand has increased, the facilities of the southern lumberman for its production has been improved and drying-kilns introduced. The best of this pine comes from Georgia, Alabama and Florida, and is generally known as Florida pine. But its popularity has led to the introduction of other species from other states, mostly from Missouri and Arkansas, and the result is that the northern dealers have in many cases an inferior grade of lumber upon their hands. The genuine yellow pine is durable, fine grained, and susceptible of a fine polish. It makes the best of floors (if it is sawed across the grain of the wood, and not with it), and as a trimming material the recently completed Burlington Railway offices show how handsome an effect it gives to an interior. The following article is clipped from a recent number of *The Gulf Stream*, of Montgomery and Pensacola, Fla., for which, with the foregoing facts, we are indebted to Mr. C. A. Street, of the lumber firm of Street, Chatfield & Co. It is to this firm that Chicago is indebted for the first introduction of Florida pine to her market, and the furnishing of a material which gives so handsome a finish to many important structures, both public and private.

(*Pinus Australis.*)

This term is but imperfectly understood, and is just now greatly misused in the sale of southern lumber in the northern market. It is not strange that shippers of lumber should take advantage of the reputation of Georgia, Alabama and Florida pines and attempt to sell everything in the shape of southern pine lumber as "long leafed." But this is so criminally unjust to these states that we feel compelled to refer our readers to the United States census of 1880 (10th census), showing the facts upon this subject. We do this with no desire to make invidious comparisons, but simply to set our timber interests right before the world.

Georgia, by her greater enterprise, has already proven the excellency of her lumber, and gained a world-wide reputation.

Alabama, however, has standing to-day over *two thousand million feet* more of the same long-leafed pine than Georgia; in addition to which she has over *two thousand million feet* of short-leafed pines (*Pinus mitis*). Florida, North Carolina and South Carolina have *all* long-leafed pine. *Arkansas*, which is set down as having *more pine* than any of the southern states except *Texas*, has *all short-leafed pine* (*Pinus mitis*), with a considerable mixture *of Loblolly* (*Pinus taeda*), but she has *no long-leafed pines*. This being the true state of facts, it is *highly unjust* for *dealers and manufacturers at St. Louis* and *other Mississippi river points* to force their *inferior pines upon* the *northern markets* on the reputation of the *genuine long yellow-leafed pine*. We only ask each dealer to note what we say and investigate for themselves, and we also wish land explorers who contemplate timber investments or for milling to give these facts the weight to which they are entitled, and you cannot fail to see that our lumber should be classed far above the "short-leafed."

Lumber.

AT a largely attended meeting of the lumber dealers of Chicago, last month, it was unanimously resolved that the lumbermen of Chicago should adopt as a rule that discounts on sales from that date be fixed at two per cent for cash in ten days, and one per cent for cash in thirty days, and that any dealer granting larger discounts should be considered violating his honorable obligations to the trade. It was also resolved that "in reducing the quotations of certain items in the price-list the lumber dealers disclaim the belief that values are not in the main correctly represented in the present price-list, but as it is an unquestioned fact that some of the dealers of Chicago, from notions best known to themselves, are selling at rates less than the price-list, and in order to bring the list into accord with the practices of the trade, we esteem it good policy at this time to reduce the quotations of certain grades." The changes in prices embraced a decline of from fifty cents to one dollar on timber, joist and scantling, boards, fencing and flooring. J. R. Wheeler, weighmaster of the Western Association, having made propositions regarding the weighing of lumber on cars, it was resolved that "we do not think the proposition for dealers to supply weights on final tickets would at all times be found practicable, from the fact that the larger shippers finish their loadings at six o'clock P.M., and often later, and to make up the final ticket would require several hours' delay at the office, this work now being done on the following morning, but we recommend that so far as practicable Mr. Wheeler's recommendation be adopted."

NOTES.

The estimated log cut put into the Kawkawlin river the past winter is 20,000,000 feet.

Upward of 13,000,000 feet of logs have been put into the lake at Six Lakes thus far this winter.

All the mills at East Tawas are being repaired preparatory to an unusually large summer's work.

The new mills now in course of erection in Orange, Texas, will give employment to 100 additional men.

During the year 1882 there was shipped from the port of Jacksonville, Florida, 68,041,546 feet of lumber.

Joseph Q. A. Rolles, of Ossipee, an extensive lumber dealer, failed last month. Liabilities $40,000 to $50,000.

Nearly every saw-mill in Big Rapids has contracts enough on hand already to keep it busy this season, day and night.

The Marinette Lumber Company's crews on the Michigamme river have now 8,000,000 feet of logs banked on that stream.

The Duluth lumber exchange enters its protest against the "free lumber" clause in the tariff bill, as passed by the senate.

J. R. Hall, of Essexville, has sold 25,000,000 shingles of next season's cut to Smith & Fassett, of Tonawanda, N. Y., on private terms.

The *Saginaw Herald* says: A. Denton, formerly of Roscommon, a pine-land broker, has just made a sale of pine in which he makes $100,000.

It is reported that lumbering operations are almost entirely at a standstill in Montealm county, Mich., on account of the excessive depth of snow.

Pine logs are getting to be valuable property when common are sold at $8 per thousand, and twenty-five per cent logs for $12 per thousand, as was recently reported at Alpena.

The Manistee *Democrat* says that one of the largest trees cut in that section was brought down at Taber's camp: 164 feet high, 100 feet to the first limb, and its logs scaled 8,508 feet, notwithstanding the fact that two sixteen feet cuts were lost from the top through breakage in falling.

Reports indicate that the log crop of the Tittabawassee will in all probability be a very little above 500,000,000 feet. The following is the estimate of new logs put in the past winter on the branches of the Tittabawassee above the mouth of the Sugar: East branch, 35,000,000; west branch, 5,000,000; middle branch, 28,000,000; Sugar river, 35,000,000; Pine river, 65,000,000; Molasses, 22,000,000; total, 190,000,000.

Architectural and Building Notes.

Plate glass has advanced; it is expected to go to fifty.

Architects have been unusually busy the past twenty days.

Dunham & Spicer are doing some elegant fresco work in a new city restaurant.

For pointing up stone work an excellent putty is made of stone-dust mixed with white lead.

George F. Kimball succeeds the plate-glass firm of Marrenner & Kimball, recently dissolved.

William Longhurst, the architect, has a number of plans prepared for dwellings to be erected on the south side this summer.

Germicide machines have lately been placed in the Leland, Palmer, Grand Pacific, Commercial and other hotels in this city.

A new firm of decorators was formed last month at Grand Rapids, Mich., under the style of Carpenter, Miller & Middleton.

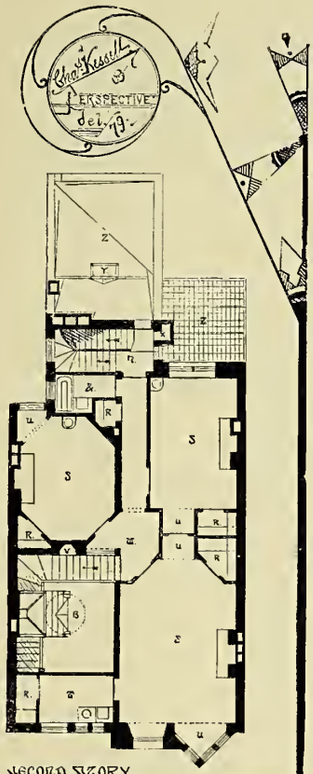
Among the dwellings to be built this summer are a number of suburban residences for which Mr. M. L. Beers is now preparing plans.

The Ruttan Manufacturing Company report prospects for a very good business this year; they already have a number of contracts on hand.

It is rumored that the comedians Robson and Crane will erect a handsome theatre near the corner of State and Randolph streets during the year.

The elegant new flats of the Wheeler & Wilson Sewing Machine Company are to be supplied with handsome gas fixtures made to order by Bassett & Beaver.

The new catalogue of C. F. Rice displays a large and handsome variety of pier and mantel mirrors. Some of the samples are exquisitely carved and engraved and are marvels of good taste and elegance.



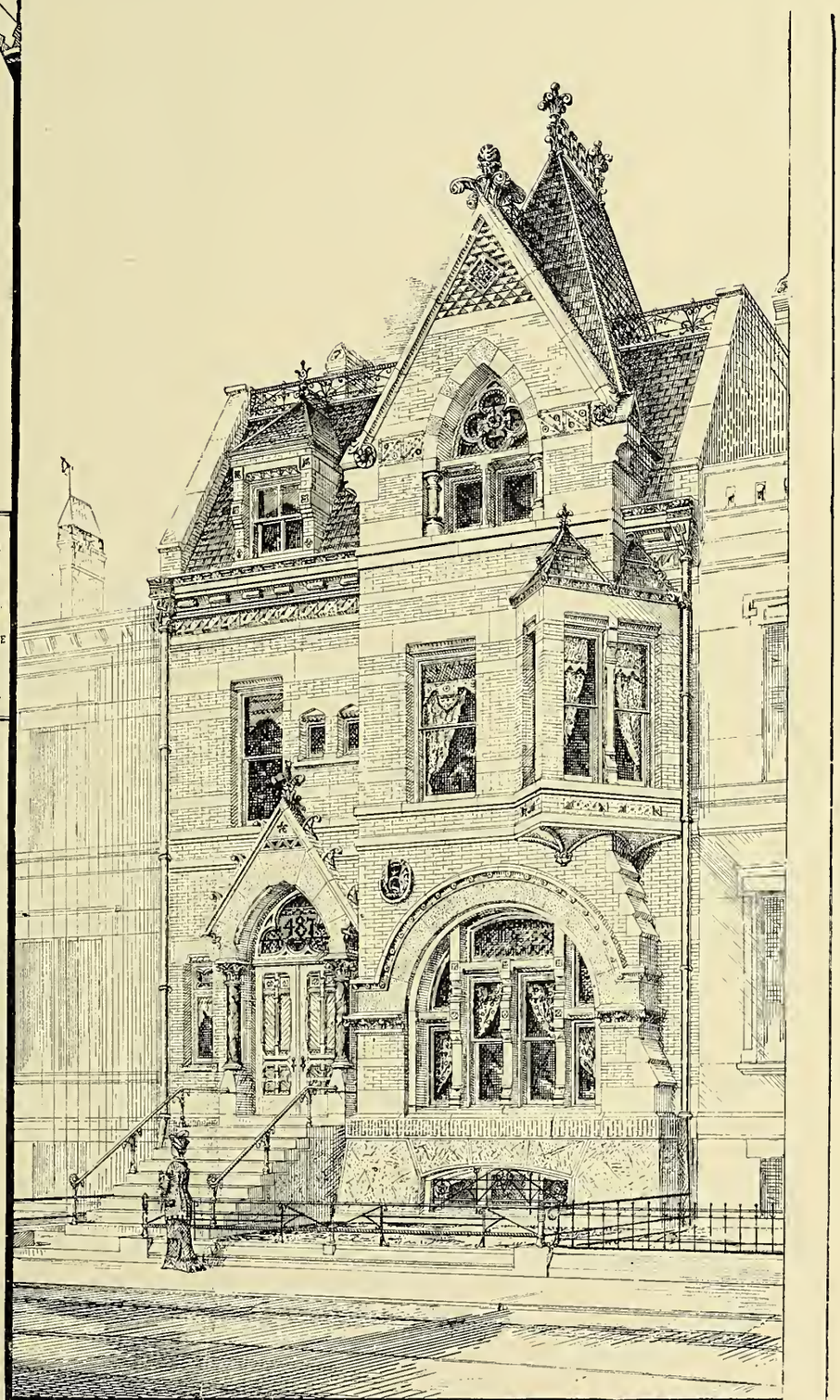
Second Story.

: Index :

A: Vestibule.	J: Cabinet.	S: Sleeping Room
B: Staircase Hall	K: Kitchen.	T: Toilet Room
C: Library	L: K: Pantry	U: Alcove
D: Dining Room.	M: Book-case	V: Clock Niche
E: Conservatory	N: Back-Stair	W: Hall
F: China Closet	O: Seat.	X: Clothes Chute
G: Butlers Pantry	P: Parlor	Y: Ventilator.
H: Hat Tree	Q: Rear Entry	Z: Roof.
I: Silver Vault	R: Closet	&: Bath Room.



First Story.



Residence of John Johnson Jr: Dearborn Avenue:
Henry L. Gay. Architect Chicago Ill.

Our roofers are very busy at this season in consequence of the unprecedented number of heavy snows during the winter. Barsley & Owens report seventy-five jobs on hand.

Mr. J. M. Rice, of Austin, Illinois, is building the Normal School, a brick structure at Cedar Falls, Iowa. F. M. Ellis, of Marshalltown, Iowa, is the architect.

The plumbing and sanitary fittings of the new Boulevard flats are the work of Thomas Kelly & Bros. This firm has recently received a new patent for a novel urinal device.

Steinmetz & Eilenberger, the builders and contractors, who were burned out the week before Christmas, have established their headquarters at 1908 Blackwell street, in the mill lately occupied by H. C. Heisler.

J. W. Hammond, architect, Frankfort, Ind., has the following work in preparation: An opera house to cost $18,000, D. A. Coulter & Brother, owners; block of stores, to cost $9,500; Henderson block, to cost $14,000.

The Calumet Iron and Steel Company have had four lines of private telephone wires put in their works, connecting the various departments. The wires were put in by Edward E. Harbert & Co., of 159 La Salle street.

The Standard Brass Manufacturing Company was recently organized in this city. It is one of the largest firms in Chicago, dealing exclusively in plumbers' supplies. Its officials include a number of prominent dealers.

Architect Hallberg has prepared plans of a new house for the Hon. E. B. Washburne. The structure is to be of pressed brick and Bedford stone with a mansard roof; the interior finished in hard woods. The style is modern Gothic.

Architect Gregory Vigeant has been awarded the contract for a new European Hotel, to be built some time during the summer at the corner of Clark and Van Buren streets. Mr. William McCoy is the projector of the improvement.

Mexican onyx is a material discovered a few years since which is being extensively used for interior decoration. A mantel made of this material by Sherman & Flavin is a veritable work of art, and is well worth a visit to their warerooms on Wabash avenue.

The six competitive designs for an office and bank building for the Commercial Deposit Company of Chicago were passed upon last week, and that of Jaffrey & Scott accepted. The competing architects were Burnham & Root, Cobb & Frost, Treat & Foltz, T. V. Wadskier, Jaffrey & Scott, and Silsbee & Kent.

The fire-proofing of the Hammond library was done by the Wight Fire-Proofing Company. Mr. Wight, of the company, is now in the East, but is expected back by the first of the month. He is there figuring on a building to be erected in New York city, during the coming summer, which it is said will cost $1,400,000.

The plans for a very handsome residence for Mr. H. H. Gardner have been completed by Cobb & Frost. The same gentlemen are preparing the plans for a fine residence to be erected by Mr. R. R. Cable, of the Rock Island Railroad, during the present year. Mr. Henry I. Frost will also erect a handsome residence for himself at the corner of Rush and Superior streets.

The largest skylight in Chicago, and probably in the West, is that above the open court in the new office building of the Chicago, Burlington & Quincy Railway. It is the Hayes patent metallic, iron-trussed, and spans an opening 54×70 feet. It has trusses of iron, is pitched from the center, and the comparatively light construction gives an almost open sky light to the interior.

Bauer & Hill have let the contract for Mr. Leo Schmidt's new residence on the north side, corner of State and Goethe streets. The cost will be $60,000. The structure will be of pressed brick with Connecticut brown stone trimmings. The Corwith building of which this firm are the architects, will be finished within two weeks. A marked feature of this building is the way in which the front is treated.

The new terra-cotta works of True, Brunkhorst & Co., a building 220×110 feet, three stories and basement in height, will be occupied immediately. These works are located on the corner of Wrightwood and Clybourn avenues, near Deering. Property in this neighborhood will feel the benefit, as nearly three hundred men are employed there, and as a matter of convenience will locate their families in the immediate neighborhood of the works.

C. P. Thomas, the architect of the Masury flats has projected a similar set of flats on the twenty-eight-feet lot adjoining. He has also let the contract for a block of stores and flats on the northeast corner of North Clark and Chestnut streets. They will be four stories and replete with all modern improvements. Mr. Hugh T. Birch is the owner. This architect has also prepared plans for a block of stores and flats on North Clark street opposite the car barns for Mr. Henry Tift. These will also be four stories high, and 117×75 feet in dimension.

The most "observable feature" in an "external sense" of the "Burlington" offices is that the walls are of brick. These red pressed brick are from the Hydraulic pressed brick works of St. Louis. The ornamentation is also partly composed of brick. Mr. J. J. Lockwood, the agent of the company in Chicago, exhibits these brick, both plain, pressed and in many styles of ornamental, at his Lake street office. They bear close inspection, and would be a favorite brick if it were for no other reason than that of their superior color and external hardness and gloss, the latter quality being noticeable after years of exposure to Chicago smoke and coal-dust.

The interior finishing placed in the Burlington railway offices and the furniture of the Calumet Club manufactured by J. Tomlinson,—now the firm of Tomlinson & Carsley,—have called forth many expressions of approval. This firm report an interior of fine woods for P. B. Moulton's house on Prairie avenue, between Eighteenth and Twentieth streets, Treat & Foltz, architects; Sidney Kent's residence, Burnham & Root, architects, and in the residence of O. R. Keith, of which L. P. Dickson is the architect, a handsome wood, closely resembling mahogany and susceptible of quite as fine a finish, called manilla, is used for the halls and staircase. Messrs. Tomlinson & Carlsey are the only firm dealing in this wood in this city.

Among the plans prepared by T. H. Waescher are a house in Lakeview for George Brauckmann of Milwaukee, pressed brick, stone trimmings, to cost $8,000; a house on Schiller street for A. Mangson, brick with stone trimmings, to cost $10,000; flats on La Salle avenue for Henry Flentye, three-story stone front, to cost $12,000; flats at 15 Willard place, brick and stone trimmings, to cost $8,000; warehouse on Market near Van Buren street for J. C. McCullom, five stories and basement, pressed brick and iron and stone front, to cost $30,000; a Queen Anne house of brick and stone for Dr. J. McGill, at South Bend, Ind., to cost $15,000; a residence house in Hyde Park and several factories and office buildings at Des Moines, Iowa.

Artificial building stone has been used to a considerable extent in Chicago since the fire. Some of the buildings after ten years' trial are in good condition, while others have scaled, the difference seemingly lying in the proportionate use of Portland cement. The most practical test artificial stone has ever been subjected to in Chicago is that of the river wall of the Farwell building. This is composed of blocks of the Weems artificial stone, is two feet in thickness, and supports a six-story brick wall. It has successfully withstood a severe winter, and as it rapidly hardens it will, without doubt, prove as good, or, as the Farwells claim, better than natural stone. Experiments prove that fragments of this stone heated and plunged into water do not disintegrate as easily as brick, and builders in search of a cheap and substantial stone for building or ornamentation should examine this stone where it is in use.

Chicago Building Permits.

The following building permits were issued since the 1st of March:

Henry White, brick basement, 20x46, 451 Jackson street	$ 3,000
Wm. Baumer, brick basement, 22x48, 492 North Wells street	1,000
Jesse B. Blank, three-story brick dwelling, 22x40x36, 651 Ashland avenue	5,000
L. Hanson, three-story, basement and attic brick factory, 60x100x50, 126–136 Curtis street	15,000
J. H. Wood, one-story brick basement, 20x40x8, 163 Winchester avenue	
J. Sokeep, two-story brick front addition, 30x40x31, 586 Center avenue	2,500
J. Prokes, two-story brick dwelling, 21x50x24, 141 Eighteenth place	2,800
F. Beil, two-story brick dwelling, 21x40x28, 624 Loomis street	3,000
A. Martins, one-story brick addition, 22x22, Twenty-third and Portland streets	
Joe. Jak, brick basement, 18x52x10, 633 South Jefferson street	1,000
G. H. Watson, four-story and basement brick rear addition, 25x20x50, 441 South Clark street	4,500
H. Sporal, brick barn, 18x23, 162 West Thirteenth street	
Seaman, Cox & Brown, three-story brick addition to keg factory, 50x80x40, 137–139 Hoyne avenue	6,000
Nathan Davis, one-story and basement brick store, 34x80x20, 2831 Archer avenue	4,000
J. M. McNichols, one-story brick cottage, 22x44, 65 Nixon street	1,000
A. C. Baumann, two-story and basement brick store, 44x60x32, 655 Halsted street	6,000
F. Wesetski, one-story brick addition, 24x6, 558 North Paulina street	
A. Finkl, two-story brick addition, 20x20, 50 Fremont street	
Wm. Eigebrecht, one story and basement brick cottage, 20x60x20, 861 Twenty-first street	1,500
Wm. Becker, one-story brick front addition, 18x20, 217 Thirteenth street	700
Joe. Gogulski, one-story brick cottage, 20x50, 608 Holt avenue	1,000
R. Joussen, two-story brick flats, 22x30x22, 1890 Lake street	1,700
Wm. Baylis, two-story brick flats, 21x49x27, 3228 Dearborn street	2,700
D. Himrod, three-story brick dwelling, 24x40x32, Belden avenue, near Clark street	7,000
Union Riding Club, one-story brick riding-school, 72x150x20, 527–531 North Clark street	22,000
Chas. Heinrich, brick basement, 20x30, 988 West Twenty-first street	600
C. Crane & Co., one-story brick office and barn, 12x24, 211 Canalport avenue	800
Thos. Politonske, one story brick basement, 20x50x9, 13 Luce street	800
Robert Fish, three-story brick store and dwelling, 25x80, 528 West Madison street	8,000
A. Walsh, two-story and basement brick flats, 21x50x32, 374 North May street	4,000
H. Sheland, one-story brick front addition, 16x20, 133 West Fifteenth street	400
M. Keiley, brick basement, 20x40, 112 North Oakly street	1,200
E. B. Pearce, two-story brick flats, 24x45x28, 375 Park avenue	3,500
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B. Shannon, two-story brick dwelling, 21x48x35, 439 Ohio street	3,500
S. T. June, four-story brick factory, 54x99x64, northeast corner La Salle and Ontario streets	15,000
P. H. Rice, two-story brick flats, 21x52x30, 129 Walnut street	3,400
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John Bruce, brick basement, 20x40, 261 South May street..... 400
Fred. Winkler, two-story brick dwelling, 21x54x24, 973 Superior street.... 2,400
M. Wheeler, three-story and basement brick store and flats, 24x70x47, 2635 Calumet avenue..... 6,000
Thos. Spaulding, two-story brick rear addition, 10x20x28, 3110 Lake P. K. avenue..... 1,800
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E. B. Sheldon, three-story brick dwelling, 25x50x40, 751 North Wells street..... 6,000
Louis Weick, three-story brick dwelling, 25x60x40, 331 Center avenue.... 6,000
Chas. Kleinschmidt, brick basement, 20x40, 1017 Twenty-second street... 1,000
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Aug. Martin, one-story brick cottage, 20x24, 261 Rumsey street..... 1,000
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C. Tiedebohl, one-story brick cottage, 20x28x15, 469 Twenty-eighth street.. 700
C. J. Hull, six one-story brick cottages, 20x30 each, 564-566 Ohio street and 7, 8, 10 Ashley street..... 7,200
A. Schnacke, two-story brick dwelling, 20x70x24, 641 West Chicago avenue 4,000
Geo. Quitman, two-story brick livery stable, 41x150, 733 North Wells street 5,000
D. Dierks, one-story brick barn, 20x50, 1079 Milwaukee street..... 1,000
L. M. Riely, two-story brick dwelling, 20x32x20, 697 Indiana street..... 1,500
C. M. Perry, two-story brick store, 42x24x32, 218 Thirty-first street..... 2,500
F. C. Porter, four-story brick store, 31x74x50, 15 and 17 Dearborn street ... 11,000
Mary E. B. Thompson, one-story brick cottage, 22x44, Fifteenth street, near Western avenue..... 1,000
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G. H. Barry, one-story brick cottage, 21x47, 755 Indiana street..... 3,600
Ferd Housfeldt, two-story and basement brick dwelling, 21x62x40, 352 North Ashland avenue..... 12,000
Wm. Brown, two-story brick dwelling, 22x40x27, 1033 West Loox street.... 9,000
Fred Kleingeld, two-story brick dwelling, 22x36x24, 249 Huron street..... 2,400
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J. Nelson, one-story brick cottage, 20x38, 10 North Center avenue..... 800
Jos. Bailey, one-story brick oven, 8x8x16, 795 Congress street..... 300
Chas. Petit, one-story brick cottage, 20x40, 279 Taylor street..... 1,000
Spaulding Merrick, shelter shed, 50x100x20, 279 Michigan street.....
M. Helgel, two-story and basement brick flats, 21x58x32, 356 West Thirteenth street..... 4,000
C. Hutton, brick dwelling, 20x32, 60 Howe street.....

"As Others See Us."

A new Chicago monthly, The Inland Architect and Builder, has made its appearance. The initial number is very attractive.—*Chicago Evening Journal.*

A new candidate for journalistic favor is The Inland Architect and Builder, published in this city by The Inland Publishing Co. It is to be published monthly, and the first number is very attractive and well edited.—*Saturday Evening Herald.*

The Inland Architect and Builder is the title of a publication just started in this city, the first number of which we have received. It presents a very creditable appearance that gives earnest of enterprise and thrift.—*The Indicator.*

The Inland Architect and Builder is the name of a new publication devoted to architecture, construction and decoration in the West, published in this city. The first number is well edited, and contains a variety of interesting matter upon the above subjects.—*Cheek, Chicago.*

Chicago has a new monthly journal called The Inland Architect and Builder, devoted, as its title indicates, to architecture, building and decoration. It fills a want long felt in the West, and will undoubtedly become a standard publication.—*St. Joseph, Mo., Daily Herald.*

We welcome the advent of a new and very tasty publication entitled The Inland Architect and Builder. The paper is to be issued monthly, and gives promise of being a very interesting and instructive journal. We congratulate the publishers on the appearance of their first number.—*The Watchmaker and Metal Worker, Chicago.*

The Inland Architect and Builder, devoted to architecture, construction, decoration and furnishing in the West, is a Chicago publication, the first number of which we have received. It is beautifully printed, and filled with well written articles bearing upon architecture, building and decoration.—*Southern Lumberman, Nashville, Tenn.*

The Inland Architect and Builder made its bow this week to the Chicago public, and a graceful and dignified one it was. The well edited monthly is exceedingly neat in appearance, and the contents are fresh and judiciously selected. The publishers, the Inland Publishing Company, should make a success of their venture if it is kept up to its first promise.—*Chicago Inter Ocean.*

The Inland Architect and Builder is the title of a monthly publication just issued here in the interests of general architecture. It contains many valuable articles on artistic architecture and interior decoration. It is published by Messrs. L. Muller, Jr., and R. C. McLean, the latter being managing editor. Typographically it is one of the handsomest of the many publications of this city. — *Chicago Correspondence Louisville Courier Journal.*

Vol. 1, No. 1, of The Inland Architect and Builder, a monthly journal devoted to the interests of Western architects and builders, was received last week. The journal is replete with well prepared articles, and short, pithy paragraphs, and also contains a cut of the new Calumet Club House. The Architect and Builder will commend itself to all interested in the subjects handled, and will certainly meet with success.—*The Evanston, Ill., Index.*

The Inland Architect and Builder is the title of a new Chicago monthly devoted to architecture, decoration and furnishing. The first issue is exceedingly promising, being very handsome in appearance, and containing a variety of interesting and valuable information. The editorials are pithy and show an evident appreciation of the journalistic field in which the new paper has just entered.—*Industrial World, Chicago.*

We have just received a copy of the initial number of The Inland Architect and Builder, a monthly journal devoted to architecture, construction, decoration and furnishing. Mr. L. Muller, Jr., is manager, and Mr. R. C. McLean, formerly of Evanston, is managing editor. The journal presents a fine appearance, and we doubt not will become popular. We congratulate our friend McLean on his effort in this direction, and wish the Inland Architect great success.—*Evanston, Ill., Citizen.*

The Inland Architect and Builder is the name of a new monthly journal, published at Chicago, and devoted to architecture, construction, decoration, furnishing and the kindred arts. It is got up in an exceedingly neat and tasteful manner, contains

much that is interesting, novel and useful, and is well illustrated. Its mechanical make-up is excellent, and it is published at the very moderate price of $1 a year.—*Brick, Tile and Metal Review, Pittsburgh.*

There has been received the first number of The Inland Architect and Builder, a monthly journal devoted to the interests of Western architects, builders, house decorators and furnishers. The number is well filled with interesting original matter, and is handsome in typographical appearance. A page is given to illustrating the new Calumet Club building from a perspective by Burnham & Root, the architects. The journal is published by the Inland Publishing Company, and makes a thrifty showing of advertising.—*Chicago Tribune.*

The Inland Architect and Builder is the title of a monthly journal, the first number of which has just made its appearance at Chicago. Its title indicates the field it is intended to occupy —architecture and architectural decoration. It is beautifully printed on toned paper, and is a marvel of typographic excellence. It is edited with judgment and ability; does not "slop over," as too many Western papers are apt to do; and is filled with useful and interesting information of value to real-estate owners. L. Muller, Jr., is manager and R. C. McLean is the managing editor. We shall be glad to hear of the success of the new journal, which we have good reason to know is in the very best hands.—*Hamilton, Ont., Spectator.*

The manufacture of mantels, piers, etc., is a prominent industry of Chicago and other large cities. Among the men whose work in these articles is justly celebrated is Mr. Isaiah Bloch, of Wabash avenue. Mr. Bloch has lately added to his already extensive catalogue many new designs, besides increasing his corps of workmen and facilities in the way of machinery, etc.

Prairie avenue, from Twenty-second to Thirty-first street, and Dearborn avenue from Chicago avenue to the park are to be paved with Asphalt's blocks, made by the Asphalt Block Manufacturing Company. These blocks are quite popular as a paving material. They are composed of asphalt subjected to a very heavy pressure, and are said to be almost impervious to the wear and tear of street traffic, resisting the extremes of a climate as changeable as Chicago's successfully.

Normand S. Patton, an architect who first studied in Chicago, for a time employed as draughtsman in the office of Architect W. L. B. Jenney, afterward in business for himself, located in the Metropolitan block until five years ago, when he went to Washington, and since that time has been in government employ in the iron construction department under Supervising architect Hill, has been called again to Chicago to take charge of the iron construction and act as consulting engineer upon the new eleven story building to be erected by the Armours. Mr. Patton has enjoyed exceptional advantages in the study of iron architecture and now, upon the eve of an era of iron and fire-proof construction, his accession is a most valuable one to the craft in Chicago. It is understood he has come to stay and has established a temporary office in Room 6, Grannis block.

Exchanges Received.

The American Cabinet Maker and Upholsterer, Boston, Mass; *The Furniture Trade Review and the Interior Decorator*, New York; *The St. Louis Furniture Manufacturer*, St. Louis, Mo.; *The Hydraulic and Sanitary Plumber*, New York; *Brick, Tile and Metal Review*, Pittsburg, Pa.; *Industrial World*, Chicago; *The Builder*, Holyoke, Mass.; *The Art Interchange*, New York; *Southern Lumberman*, Nashville, Tenn.; *Builder and Woodworker*, New York; *Southern Manufacturer and Builder*, Louisville, Ky.; *The California Architect and Building News*, San Francisco, Cal.; *The Manufacturer and Builder*, New York; *Carpentry and Building*, New York.

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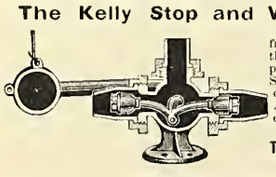
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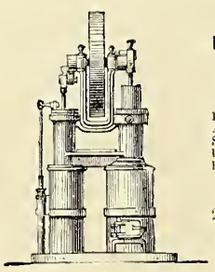
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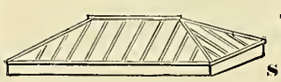
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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 3

APRIL, 1883.

THE INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

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Construction, Decoration and Furnishing

IN THE WEST.

PRICE ONE DOLLAR PER YEAR.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

Letters containing the latest building news and gossip from St. Louis, St. Paul, Detroit, Cincinnati and other points will be a prominent feature, and correspondence is invited from architects and builders throughout the country.

The aim of this Journal is to become the medium of communication between those in whose interests it is published. Matters of news and valuable facts appropriate to this Journal will be promptly published and proper credit given.

DURING the past month American architects and artists have received from two sources marked recognition and prospective support. First, the will of the late Levi Hale Willard, a descendant of the American spy, shot in New York during the revolution, and a large stockholder in the American Express Company, bequeaths a portion of his estate to the establishment of a museum of architecture and the purchase of models, casts, drawings, photographs, engravings, and other illustrations of the art and science of architecture, to be kept upon permanent exhibition. The bequest is placed in the hands of, and the collection is to be made by, a commission appointed by the New York chapter of the American Institute of Architects. This bequest supplies to the students of architecture in America something their genius has often reached out for and desired but the lack of means has denied, a perfect collection of all the best and most creditable in modern architecture to be used as models, to freshen and vivify the work of our young architects and artists, and be used as a groundwork for future development.

The second is the proposition made to our young artists under 25 years of age, by the proprietors of *Harper's Weekly*, who offer a prize of $3,000 as a reward for the best original drawing illustrating a Christmas hymn written some half a century ago, by Alfred Domett; the money to be used in the study of art at home and abroad. A printed copy of the poem will be sent to artists upon application. The drawings must be sent in before August 1st, and the announcement of the successful competitor will be made upon the publication of the drawing in December, 1883. R. S. Gifford, F. D. Willet, and Chas. Parsons are mentioned as the judges, and we have no doubt but that the competition will be highly interesting, and draw out the evidence of much talent among our young artists.

A SINGULAR accident occurred on the 10th inst. in Chicago by which the floors in one part of a large warehouse fell in. The structure, which was about 100×200 feet, five stories in height, and costing in the neighborhood of $100,000, was built for the Champion Reaper Company, to be used as a warehouse for the storage of farm implements and machinery, and at the time of the accident the firm were beginning to fill the rear floors with machinery. The walls were of brick and sufficiently solid in construction. The interior was framed with wooden joists, beams, girders and wooden supporting columns, the floor beams being securely anchored to the walls. After a careful examination the fall seems to have been due to a weak construction in beams, piers, and their foundations. Directly opposite a large wagon drive-way two piers had been taken out and the adjoining piers enlarged to correspond with the additional weight brought to bear upon them. One of these piers and a smaller pier next in the course gave way and drew the floor beams out from the walls. The accident occurred at night. The watchman reported that he heard two concussions, one following the other at an interval of about three minutes. It is impossible to determine which pier was first to give way. The following night a gale that approached a tornado in force blew in the unsupported walls upon one side, completing the wreck. Examination shows the piers to be two feet square, built of common brick, with a six-inch cap of limestone, upon which rested a wooden column. There are several theories advanced by able architects regarding the cause of the collapse. They say that the stone capping should have been twice as thick. An iron plate should have been placed on top of the cap stone for the wooden column to rest upon, and as the stone was observed to be cracked sometime before the accident occurred immediate support should have been placed below the beams to help sustain the weight until the stone could be removed and replaced. The owners of the building fully exonerate the architects, and say the accident was perfectly unavoidable, and this is the most charitable view that can be taken of the matter. It is certain that too great care cannot be taken by architects in the weighing of piers and in carefully superintending their construction. The building foundations are being thoroughly reconstructed and the brick piers replaced with iron columns, with largely increased foundations.

THE strike of the bricklayers' union is at the present writing in active operation, with little hope of immediate change. A more ill-advised strike than this it is impossible to conceive, coming as it does before the building season has fairly opened, and at a time when at the best capitalists are hesitating about investing, and on the heels of a season of depression in business circles. So much for the advisability of the strike. It is its purposes that are of the more vital importance. Always a turbulent class, the bricklayers of Chicago have massed themselves, and feeling they have power, endeavor to completely subjugate the contractor, and through him the owner, to the wishes of their union. They make the rate of wages; they state the number of men and of apprentices each contractor may employ; and, in fact, to all intents and purposes, the bricklayers' union fully controls a building until the last brick is laid. Last month we gave the main features of the strike. As we suggested then the owners have joined hands with the contractors, and the material men have also combined with them, firm in the resolution that the bricklayers' union must cease to exist. And it will. The contractors have neither been blind nor idle. They have seen what was coming and amply prepared for it. They see that if they are not victorious now it will only be an inauguration of another strike for still higher wages when work gets well under way, and that their success will prompt other classes of mechanics to strike in a similar manner, and always leave the contractor in a state of doubt as to what future work will cost him. If the union had, instead of saying that every man, no matter how inferior his capabilities as a mechanic might be, should receive four dollars a day, made an equitable scale of prices, a strike would have been avoided. But instead, the ignorant heads that run the union, men of more experience as ward politicians than as masons, have prevented those who have families to support and are willing to work from earning their daily bread, and have allowed several weeks of the best of building weather to go by, spending the time in useless dispute and attempts to perpetrate a wrong. Fortunately the city is filling with non-union masons from the surrounding cities and from Canada, and there are enough good men at the disposal of the contractors to keep the most pressing work from falling behind. Meanwhile, if the architects and owners will continue to combine with the contractors, who are so earnestly and persistently fighting this great damage to our city's welfare and help them in every way to destroy this senseless and menacing union, its force will soon be expended and the question will be settled, and we are quite certain that if settled now and in this way it will be many years if ever before the bricklayers will again strike upon an arbitrary measure.

THE question has often arisen but, according to the reports of the Supreme Court, has seldom come to legal issue, of how far does an owner's right extend in regard to the neighboring soil. In western cities, particularly where the original structures are fast being removed, giving place to more substantial buildings, and where vacant lots are being rapidly built upon, the foundations of the new are often dug close to those of the adjoining house, and continuing to a greater depth render the walls liable to settlement or destruction. The case of the city of Quincy against Jones, reported in 76 Ill., page 231, is one in which Judge Scholfield delivered an opinion which at once sets at rest all controversy. In this case the city of Quincy "made a deep cut in the earth adjoining said premises, whereby said house became undermined and of little value." The case was tried in the lower courts, and finally settled by the Supreme Court, establishing the principle that "even if a building erected by me near the boundary of my lot is injured or endangered by an excavation made by my neighbor in his premises, I can not complain, because I have no right to the use of his soil for the support of my buildings." In the common instance where a private individual builds without sufficient depth to his foundations, and the owner of the adjoining lot begins to excavate, instead of a legal fight and lawyers' fees it were better for him to understand at once that he alone is responsible for any damage from his neighbor's excavation, and spend the time and money in procuring sufficient support for his building, independent of the neighboring soil. The law goes farther, and says that he is also liable for damages if his wall falls into his neighbor's excavation. This case is decided upon the rulings of about a dozen like cases, all that have ever been tried in this country or in England, all of which are in support of the ruling of the Supreme Court in the Quincy case.

FOR several years after the great fire Chicago buildings were almost universally built with stone fronts, some extremely plain, but the majority ornamental in their architecture, and all comparing favorably in architectural beauty with those of any city in the Union. The stone used has been largely Joliet marble, a light-colored limestone, and when carved or finished has a rich cream-color, which is pleasing in its effect. This is when new, but the steam-tugs on the river, the railway locomotives, the manufacturing establishments, the steam-power for elevators, and steam for heating purposes, have called into use large quantities of soft coal, the smoke of which has soon besmirched and blackened the fairest stone fronts, and thoroughly destroyed their architectural beauty. To what an extent, was recently illustrated by a stone front on State street. The occupying firm have been prominent enough, but no one ever saw anything in the building to admire till one day the owners painted it white. This brought out all the columns, window-caps, cornices and other architectural features, and made this front much more noticeable than those of greater pretensions, but still covered by the inevitable soot. And there is no abatement. True, an ordinance has been passed; the city sanitary inspector is supposed to prosecute all who make dense, black smoke, but when the cases come to trial the defendant, if he be a tugman, invariably says he has not put a consumer on his boat "because there are none in the market," and that, with a letter in his pocket from some reliable smoke-consuming device firm, bearing the indorsement of owners of tugs who have put on the device and found it a complete success. The owner of a steam factory will say "we have tried experiment after experiment, and none of them will work." Some put on a device — usually the cheapest and most inefficient to be procured — and say "I have one on my boilers." All working to evade the law, and all contributing their share toward the soiling and blackening of every beautiful structure or fabric that is exposed to the polluted air. It is true that some men have honestly tried and have been swindled by poor machines; others have been deceived by their engineers not giving the device a fair trial, but none can say that there is no remedy, for there are many smokeless chimney stacks and locomotives, rendered so in the past six months by successful

smoke consumers in our city, and thousands are in successful use here and elsewhere, and the man who honestly wishes to abate his smoke can easily find where they are and what they can do toward making the air of Chicago clear and fresh, and preserving the beautiful features of our architectural creations from ruin.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART II.

THE Semitics were a very different race from the Turanians, existing from a very early period in western Asia; with all the marked characteristics of the Jewish race of the present day—unchanged, unchanging. How long they must have lived apart to have so thoroughly established these specific characteristics before the arrival of the Aryans upon the scene it is useless to speculate, certainly for a very long period. To the zoologist the differences of the Aryans, the Semitics and the Negro are sufficiently marked and persistent to establish distinct species in the genus homo. The God of the Semitics had never lived upon earth, and required no palatial temples like the Gods of the Turanians.

The far-famed temple of Solomon was only about the size of Grace Episcopal Church, on Wabash avenue. It was of a temporary character, little more than a wooden tent externally, and internally gilding, silvering and polished brass took the place of architectural forms, that they certainly did not understand. Their best work was in Assyria, where, however, they were mixed with the Turanians and Aryans; where, after they had learned the use of stone from the Egyptians, they riveted their sun-burnt brick with carved slabs of alabaster and of stone. But their art is always tame and feeble. Owen Jones collected some parallel examples of Turanian and Semitic carvings. The Turanian work is always animated, full of style and thoroughly artistic, while the work of the Semitic is tame, the horses are not running, the archers are not shooting. They often resemble the designs of children's tin toys. Throughout the Mediterranean there are found many things that resemble the arts of Egyptians, Greeks, etc., that evidently are not such, that have caused much controversy. The probable solution is that they are copies of Semitics.

Following the Turanians in Europe came the Celts. Entering from western Asia, they spread themselves over most of Europe by different routes, everywhere mixing freely with the primitive people. The Celts represent the age of bronze. Their weapons and tools were of copper, hardened with tin, a great advance in civilization over stone implements, but equally inferior to those of iron and steel introduced later by the Aryans. The present type of the Celt is the gay, rollicking Irishman, who seems to have changed but little from the old Celt of the primitive period. In religion they had a king and queen of heaven, besides innumerable saints, in whom they placed implicit confidence. To the architect the Celts are a very interesting race, for although we know not whence they came, and but imperfectly where they settled, still we can trace the influence of their special genius for the arts through all the best architecture of Europe. In fact, the excellence of any architectural work would seem to be in direct proportion to the amount of Celtic blood in the builders. The mediæval cathedrals, with all their artistic excellence, are due to the Celtic influence, as in France; whereas the art disappears and the cold framework and stiff, copy-like details only remain where there is little or no Celtic blood, as in northwestern Europe, which is pure Aryan. The strong characteristics of the Celtic race is restless intellectual progress, while the Turanian is eminently conservative.

Next following the Celt came the Aryans, or those of the Iron age,— originating, as far as we know, on the Upper Oxus and the mountains of Thibet or Central Asia. They increased rapidly, and sent colony after colony down the Indus into northwestern India and westward over all of Europe. In India they became so mixed with the Turanians, that by the tenth century after Christ they are scarcely to be recognized. In Europe they first appear prominently in Greece, then inhabited by the Pelasgi, apparently a Turanian race, probably mixed with the Celtic. The Aryans were intellectual and scientific. The Turanians were great and methodical, but very conservative builders; the Celt, restless and progressive. The mixture in Greece was in such happy proportions as to produce a civilization which, contrasted with its surroundings and its epoch, was the most brilliant the world has seen. They next appear among the Turanian Etruscans and the powerful Celtic tribes of Italy, and lastly in northern and western Europe, from which they are again migrating westward and spreading themselves over the United States from the Gulf of Mexico to Canada and the Pacific to produce a new center of civilization; and if we could but "cast its horoscope," we should see a future whose dazzling brilliancy would eclipse all that has gone before.

In the fine arts the Aryans are deficient, while they excel in the useful arts. Practical common-sense is their characteristic. They demand in their architecture convenience, and that their requirements should be reached in the most direct manner. These are, in fact, the first principles of good architecture, but there are two others that lift it from the merely useful to a prominent place among the fine arts, namely, that the construction shall be ornamental, and that the construction shall be ornamented.

By ornamental construction is understood a pleasing proportion of the parts, arranged in a composition that shall of itself be beautiful without any further ornamentation. This is the appearance a building presents when seen from a distance sufficient to hide the smaller details. By ornamented construction we mean the decoration of the constructive features — for example, a plain post or pier is the construction — which we can ornament by a moulded base, a fluted shaft and a carved capital.

The useful part the Aryan loved, but cared little for the ornamental, although to be in fashion he would copy coldly the work of others.

In religion, the creed of the Aryan was ethereal — he believed in one great God, omnipotent, omnipresent — his worship was a prayer acknowledging the greatness of his God and his own insignificance. For this he required no palace temple — like those of Egypt — nor a pointed arched, buttressed and pinnacled Gothic cathedral, decorated with painted glass, flowing tracery and lace-like sculpture. His simple worship, the singing of a hymn and the reading of a few passages believed sacred, could be performed wherever most convenient,— in the valley, in the mountain cave or in the simplest shelter erected by man.

As neither the taste nor the religion of the Aryan required the æsthetics of architecture, he neglected them, and does so at the present day, unless the arts become a matter of study or fashion. In this case, that innate feeling for art possessed by the slow-going Turanian and the lively Celt is wanting; and although the result may be creditable, it lacks that well-known but almost indescribable finish that lifts it at once into the realms of high art.

We have hastily reviewed the salient characteristics of the great building races most interesting to the architect. We have seen that the Turanians of the stone age were a great building race, but at the same time very conservative. What was good enough for their great-grandfathers, it would be lacking in proper respect for their ancestors were they to presume to modify it, for was not ancestral worship the religion of the Turanian?

The Semitics did not in ancient times inhabit Europe, but, mixed with Turanian and Aryan blood, they founded the great empires of Assyria and Babylon—splendid, magnificent. But their art always fell below that of the Turanian.

The Celt, a gay, rollicking fellow, always restless, mingling freely with every people he came in contact with, a worshiper of saints innumerable, for whom he would erect elegant churches, always an artist and always adding artistic qualities to every people with whom he came in contact.

The Aryans, we have seen, were an intellectual race. In possession of an alphabet, they assumed a literary position that other races never attained to. In government all their institutions tended toward the republican form. In science they attained a high position. They excelled in agriculture, manufactures and the useful arts generally, but were too matter-of-fact to excel in the fine arts. In short, when builders, they were engineers and not architects.

It is the work of these races, the styles that they have produced, that will form the subject of this short course of lectures.

Street-Car Propulsion by Electricity.

BY PROF. A. A. GRIFFITH.

WHEN Dr. Franklin's kite went up to make a path for the lightning, he prepared a way for us to protect our homes from the greatest force in nature. It is now demonstrated that electricity is that form of force which is best adapted to transmit energy to a distant point. With the aid of suitable mechanical appliances, electric force is made to move machinery when placed within its reach. As steam must be harnessed with iron bands to give us the benefit of its energy, so electricity has its choice of livery; and when it becomes known, to a certainty, the kind of carriage in which this monarch prefers to travel — a secret that is being discovered in this day of magnificent electrical experiments — then this power will reign king of all mechanical forces. The energy called electricity is the same, whether used to cure diseases, in carrying signals by telegraph, voice by telephone, or force for mechanical purposes. The most apt illustration of the character of this energy to travel a great distance in a conveyance of its liking, without loss or weariness, is the Atlantic cable. When certain conditions are complied with, it prefers the long journey of a thousand miles — to London from New York — rather than the short half-inch that locks it in its suitable substance. America says, "Hillo," and England answers, "What is it?" as Jones, in his office, talks with his wife, at home, through the telephone.

It is only of recent date that it has occurred to our scientists that this energy, which could carry thought by prearranged signs, could be applied to the pulling of loads. Clerk Maxwell, the noted English mathematician, in answer to a question as to what he regarded the most wonderful invention of the age, replied: "The dynamo-electric machine as it is reversible" — that is, the dynamo-generator, which develops the electric current when power is applied to it, can, in turn, transform that current into power. The transforming of this electrical into mechanical power can be accomplished with no further loss than is due to such incidental causes as friction and the heating of conductors. In a properly designed dynamo-motor these do not exceed ten per cent. For transmitting power to a distance the electric current has entered the lists in competition with compressed air, the hydraulic accumulator and the quick-running rope and cable; and if there is any extended delay in the application of electricity for car propulsion, it will be for want of suitable translating and transmitting mechanism. Electricians are not always familiar with practical mechanical laws; but if it is admitted that the electric dynamo-generator, which develops this electricity when power is applied to it, can, in turn, transform that current of electricity into power; and if it is true that this electric energy, or current, can be more easily transmitted, and with less loss or waste, than results from other well-known forces, then the solution of the problem of car propulsion by electricity rests with the electrician who is also a skilled mechanical inventor. In a recent trial of electric haulage on tramcars, in England, the editor of the journal called *Engineering*, published in London, in the number for March 16, 1883, who witnessed the experiments, expresses his regrets "that the electric traction was a failure because of the inefficient electrical and mechanical arrangements of the car."

Important changes will necessarily be made in the dynamo-electric machine. Its construction must be such that it will absorb energy from the engine at a central station only in proportion to the amount of power required to be developed, varying in supply as the demand varies. This mechanical feat will undoubtedly tax the wit of inventors, but is attainable. The source of power must be supplied with suitable means whereby the energy developed may be made to meet the varying exterior demands without intervention of experts. To come into general use, the means for transmitting electric energy for car propulsion must be such as will employ appliances of cars, wheels, tracks as they are now constructed, and these latter should perform no other office than for which they were designed. In no case should they be compelled to accommodate themselves to highly scientific and oftentimes impracticable electric and magnetic requirements, which might interfere with durability. For instance, if the rails are used for conductors of current energy, this electric force, as has been demonstrated by Prof. Siemens, is constantly being dissipated by the moisture of the earth upon which they rest; and when storage cells are used, as in the latest English experiment, the car is compelled to carry an immense weight as compared with the amount of power it is possible for the storage cells to contain. Nearly two tons of these cells — fifty in all — were distributed under different seats, to be drawn from as the varying load demanded. The radial dimensions of the power-giving portion of the Siemens dynamo-motor used are of necessity very small, thus bringing the power too near the axle-line, and hence not giving sufficient leverage over the load to secure efficient practical results, and as yet there have appeared no automatic governing appliances to prevent the destruction of the electrical parts.

While the experiments made so far in Europe and in this country have reached no practical results of commercial value, the fact has been demonstrated that there is sufficient energy in electricity to give a more economical and safe means of car propulsion than what is now in use. It may be of interest to the general reader to state how experiments have been conducted.

At a suitable station a steam engine has been placed to run a dynamo-electric machine, as in electric lighting systems. The electric current has been transmitted by wire conductors, connecting with the track rails, and from them connection has been made with smaller dynamo-motors on the cars that are to be propelled. The wheels on these tracks have been properly insulated; each frog and intersecting track has been cut up and insulated to prevent what is called "short circuiting," and so rendering the line useless. Each rail is connected by a copper strop to its neighbor, and this copper strop has been finished in nickel-plate to prevent oxidation at the junction. In all these experiments expert electricians have operated each car, whose special duty it has been to control the current admitted to the motor, in proportion to the work to be done, and to prevent destruction of parts by an overcharge of current, as above stated, and also to control the direction of the cars.

This is a fair statement of the manner of conducting the experiments up to this time, and it will be seen that we are not yet ready to dispense with horses and cables. Fortunate indeed will that inventor be who shall hit upon an automatic system of car propulsion by electricity — that is, a system that can be run when properly adjusted by men of average intelligence, like our horse-car and grip-car drivers. The dynamo machine, which is the foundation of the electric power system, will then be self-adjusting, or, like a modern steam engine, capable of accommodating itself to varying requirements, no matter how sudden the change may be. The current admitted will be automatically controlled, and it will adjust itself so as to run the car in different directions. The mechanicism will be simple, and not liable to derangement of parts. The method of conducting the electric energy to the translating and transmitting devices will be simple and inexpensive, and its introduction will not greatly interfere with the lines as at present constructed. All will be so disposed as not to be easily tampered with or deranged by passing vehicles, intersecting tracks or the elements.

With what has already been accomplished, why should we not expect that such a practical system will soon be offered, developed by capital, and put into practical use?

Perspective View of Residence,
E. Baumann, Architect for L. D. Norton, Esq.
Chicago, ... Evanston, Ill.,
For The Inland Architect & Builder.

History of Chicago Architecture.

PART II.

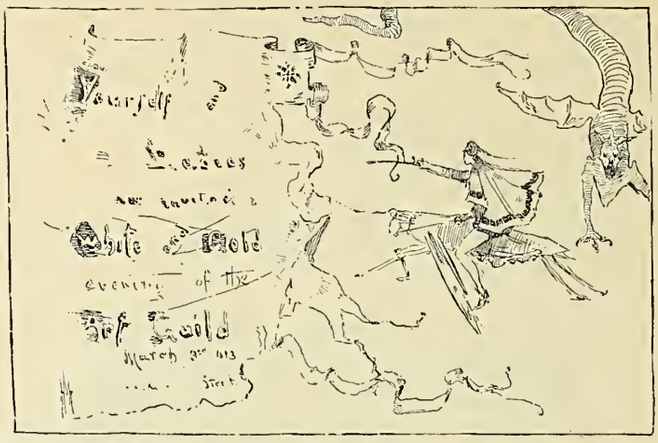
RECOLLECTIONS OF JOHN M. VAN OSDEL.

IN 1837 there were not more than one thousand buildings in Chicago. About twenty of these were brick structures, the great majority being of woodwork, nearly half the whole number being one-story cottages, and none more than two stories high. The roofs, without exception, were shingled—the tar and gravel roof so extensively used in later years was unknown at that time. Among the very few buildings that made any pretentions to architectural ornament were the residences of W. H. Brown and John H. Kinzie in the north division, and of Dr. John T. Temple and George W. Snow in the south division. Mr. Snow was the inventor of the "baloon frame" method of constructing wooden buildings, which, in this city, completely superseded the old style of framing with posts, girts, beams and braces. In balloon framing the sills and joists of principal, or first floor, are framed in usual manner, supported on posts set in the ground or on pins or walls of masonry. The walls are formed of upright scantling of 2×4 or 2×6, these are tenoned into the sills; at the height of first story a ribbon or strip, 1×4 inches, is let into the inner edge of the wall studs, and the joists for second floor resting on this ribbon are firmly spiked to the wall studding, plates from one to two inches thick are spiked to upper ends of the wall studs. The rafters and ceiling joists are spiked together at the foot of the rafters and nailed to the plates. The entire building is then sheathed with inch-board, the roof is shingled and the sides clapboarded. To resist lateral motion, dependence is placed upon the connection of each joist with the wall studding and the resistance of the sheathing which is sometimes put on diagonally instead of horizontally. The great rapidity in the construction and large saving in cost, compared with the old-fashioned frame, brought the balloon frame into general use. It is conceded that a frame with every part spiked together offers greater resistance to lateral force than any other method of construction. As an evidence of its power to resist such force, it may be stated that the "Bull's Head Hotel," built by Matthew Laflin in 1848, on the site of the present "Washingtonian Home," at the junction of Ogden avenue and Madison street, was a three-story balloon frame of large dimensions. Standing upon the open prairie, with hardly a building within a mile of it, this structure was exposed to the fierce, unbroken prairie winds, yet remained unshaken for many years, until it was taken down to give place to the present improvement. The balloon frame is peculiarly a Chicago institution; its reprehensible character was made manifest in the great conflagration of 1871. Since then the city has prohibited the construction of any frame buildings, and the balloon frame has passed into history—or perhaps into the surrounding country. The great fire obliterated nearly every building constructed prior to 1838. A few, however, had been removed to the suburbs and remain, illustrating the classic style of those early days. Notably the block on west side of State street, near Twelfth street, known as "Rotten Row," and numbered 546 to 560 inclusive. This block of buildings was first located on Lake street, opposite the Commercial hotel. The east end of the block, forming a front on Dearborn street, still retains its corniced pediment; the broad entablature under the front eaves has its frieze enriched with oblong quadrangular openings resembling port-holes, and utilized to light the cock-loft or attic of the building. The block is about one hundred feet long and thirty feet deep; was cut into three sections for convenience in moving. Lake street was the principal business thoroughfare in 1837, and this block was looked upon with pride and satisfaction by the business community of that day.

The late styles of wall-paper are so gorgeous that a family can no longer take comfort wearing out old boots and split-back vests around the house. Everybody sort o' feels as if he was away on a visit.

A sash-weight cord composed of a flat piece of steel tightly wound with a small copper wire has been much used, also round steel rope. The former kind has been in use for the past ten years in the *Tribune* building, but as fast as repairs are needed a tightly wound, fine stranded Italian hemp cord is used, which is considered by practical builders to be superior to all others.

The Chicago Art Guild.



THE opening of a neatly rolled scroll of white etching paper, tied with gold ribbon, revealed an engraved design of which the above is a reproduction.

To a bachelor with a heart and soul devoted entirely to art the "lady" in the invitation had no attraction; the artistic, however, won, and the result, the "white and gold" evening with the Art Guild. Up a flight of stairs to the second floor of the Fidelity building, a hall opening into rooms with iron arched ceilings now transformed into a fairy boudoir. White and gold the groundwork everywhere, and glimpses of sketches, tapestry and bric-a-brac resting against this background. On entering we receive a cordial welcome from the president of the Guild and a smile from the lady representative of a city daily, whom we join presently and feel at ease with; for did we not labor together in the days of our apprenticeship to journalism, the days "when we made bricks in Egypt"? And here is Mr. C., a designer of some celebrity, whose forte, we supposed, was the expression of ideas upon the drawing-board rather than in conversation, but the fair reporter is soon "doing" the exhibit with him as a guide. Here are a number of studies by Field, but not as good as he can do when he tries. Some of Earle's water-colors, and other sketches, paintings and etchings, all bearing names of young but rising artists. A "monotype"? "Well, a monotype is"—and the sudden hush and a clear voice rising in song accompanied by skillful playing of the piano stops the explanation. Surely an informal gathering; music, sociability, artistic talk, informal refreshments and a general fraternizing, very pleasant to behold. The artists themselves have hung the rooms as you see them, each contributing something as a drapery or an ornament to the walls, and each endeavoring to entertain the guests of the evening.

Great natural causes have worked toward the establishment of this fraternal society of the arts, and nowhere has the need of such an association been felt as in our own country and in our own West; for where there is no repository of or opportunity to exchange opinions upon art matters, the complete enlightenment or refinement of any country or people is retarded.

Whenever an art-work is proposed, the best the public may expect is the empirical and isolated criticism of some painter or other artist. Artists themselves also suffer because of their comparative isolation from each other, and because there is not accessible to them the criticism of men devoted to some one of the other arts; for it will be seen that this criticism is immensely more valuable than that of mere laymen, or even of others engaged in the same department of art, being on the one hand trained, and on the other unprejudiced.

The Art Guild was formed to meet these two needs of association and criticism. It does not aspire to supplant any association formed within the limits of any art. Its members are composed of painters, architects, musicians, art decorators, sculptors, art critics, and the patrons of these arts.

There is Mr. S., the sculptor, Mr. P., a noted musician, and a prominent architect, together discussing the question of to whom belongs the credit of first producing

monotypes, and a knot of artists are admiring the pose of a lady, the wife of an architect, whose face recalls one once painted in Italy. Here is the largest lumber dealer in this country, or the world, talking to a knot of architects, and looking the picture of enjoyment. The absence of the promising young sculptor Donoghue is regretted and his manners and talent discussed by two ladies, one of a musical fame not local in its extent, and the other a lady who is spoken of as possessing a real artist's talent and an amateur's enthusiasm. There are very few of that class who affect art for fashion's sake with no appreciation of its value, all having apparently come to enjoy a social hour and to both give and receive some good.

To these receptions, each one of which has some special signification like this, "white and gold," the non-art public is invited to meet under favorable auspices artists of these various aims. It is hoped by this means, and the establishment of this club, that such an influence may be exerted upon the community that matters of public interest in any one of the recognized fine arts may always have the judicious criticisms of an association of unprejudiced artists, that the public at large may have the educational value of such an organization, and that the artists so associated may be benefited by the criticisms and esprit resulting from it.

The Guild is already in a flourishing condition. John W. Root, an architect who, though young in years, is not unknown throughout the architectural world as a man of original ideas, and already standing among the first in his profession, is its president. Louis J. Millet, an art decorator and designer of considerable note, both in this country and in Europe, and, it is understood, a cousin of the great French peasant painter, Jean Francois Millet, is the secretary, while its members are composed of the leading artists in the different departments of art which the Guild represents. These artists and their guild deserve well of the public, for they represent the visible refinement of the century; but they also need to lay aside all thoughts of self, all jealousies, and, what is sometimes as hard, their own ease and comfort, and work for the kindling and perpetuating of a fraternal feeling, and then the Art Guild will become a permanent good and a lasting honor to the art-world it represents.

Art Notes.

The Illinois Art Association will open in this city on the 25th.

The Detroit Sketching Club has given up the female model in its life class "in deference to public opinion."

Henry Herkomer has taken a studio in Boston, where he is painting the portraits of several Boston gentlemen.

W. B. Conely, of Detroit, Mich., has two oil-paintings, entitled "Nearly Home" and "Down to the Spring," in the exhibition of the National Academy, New York.

Fields is going to paint a companion-piece to his picture "The Wish," which is still on exhibition at Furber's gallery. The companion will be called "Good Luck."

Onslow Ford, the English sculptor, has completed in clay a life-size figure of Mr. Irving, seated, in the Danish dress which he wears during the soliloquy in "Hamlet."

Rough on Rising Talent: *Brown*—"Don't think you are doing as well as you were last year. *Robinson*—"But I was not painting at all last year." *Brown*—"Exactly so! That's just it!"

A much-felt want is to be somewhat relieved in Boston, where a building is erected on Hamilton place, to contain a number of studios, and the university building is to be converted into a studio building.

The sixth annual exhibition of the Society of American Artists at Kurtz gallery, New York, has been generally damned with faint praise, as showing a distinct falling off from the standard set this year and the year before.

She had just visited the studio of an artist famous for painting interiors, and she was going into raptures over his work. "Then you think him a great painter?" "Delightful! So much feeling. Such good color. His insides are just too charming for anything."

Says the New York *Tribune:* "Cottier, on Fifth avenue, has a Millet, the 'Sower of Seed,' for which the price is $30,000; he has a Corot, the subject probably a Sappho, for which the price is the same; and a Doré, with four fine heads in it, life-size, representing the 'Mocking of Christ,' and cost only £150. Such is fashion."

Henry Rosenberg, one of the best of the few really good artists in Chicago, is talking of leaving the city and going abroad. The portrait of a lady, in black and gold, is the latest work of this artist. The picture is full length, life-size, and is a revelation of Mr. Rosenberg's powers, and quite the best thing in portraits we have seen in our tour among the studios. It is to be regretted that so talented an artist has decided to leave us.

J. A. Hekking, of Detroit, has just completed a very fine oil-painting which represents a charming pastoral scene. In the foreground is a group of three cows and a flock of sheep which are being driven along the country road by the herdsman who is mounted on a white horse. All of the animals are seen foreshortened, the grouping and action being excellent. The background is a very harmonious and well painted landscape.

The Chicago Pottery Club have just completed arrangements for the erection of a kiln for the firing and glazing of pottery. This is intended to meet a want long felt by those engaged in that work, as formerly all pottery had to be sent out of the city to be fired. Joseph Baily, late of "Rockwood" Pottery, Cincinnati, has been engaged, and his ability is too well known to require any other guarantee as to the manner in which the work will be done.

Recent Paris prices are: Rousseau, "Road in the Forest of Fontainebleau," 20,500 francs; Delacroix, "Calvary," 10,000 francs; Daubigny, "The Grass-Burners," 12,000 francs, and "The Banks of the Oise," 10,000 francs; Diaz, "Women at the Bath," 15,000 francs; Corot, "The Road to Coubron," 6,300 francs; Fortuny, "Return of the Procession to Madrid," 8,200 francs; Isabey, "The Alchemist," 9,505 francs; and Troyon, "The Woodcutters," 8,055 francs.

A Washington letter says: "The Capitol is fearfully littered up, and three of the vast expanses of paint and canvas known as Trumbull's historical pictures are being restored. The intense light coming from the dome would ruin any pictures, and it has alternately scorched and bleached them until not only are the colors destroyed, but there are great cracks in the canvas. A local artist is doing the work, and it will probably not be finished until September."

The *Academy* says of Mr. Thomas Moran that he is "one of the most original and thoroughly national artists that America has produced, and his etchings are characterized no less by suggestiveness of light and space than by ready seizure of landscape character. That given in the thirteenth number of 'American Etchings' is quite representative and gives that interest to the meagre country at Three Mile Harbor, Long Island, which can only be seen by an artist and expressed by rare skill in selection of line."

The gallery in which fifty-one of Mr. Whistler's etchings are being exhibited in London is hung with golden yellow velvet and lemon yellow and white muslin; there are canary-colored chairs and fawn matting. The catalogue is a collection of the unfavorable criticisms received by the artist, and is printed in yellow, the black and white etchings are in white frames on a wall of white felt. His friends were asked to dress in harmonizing colors at the private view, attended by the Prince and Princess of Wales. Although many of the pieces have merit, the exhibition as a whole is considered rather farcical.

Some years ago an artist, who rejoices in a very European name, but is an American to the backbone, was obliged to go to Paris. He had a number of paintings which he tried to dispose of before he went; but no dealer would touch them at any price because they were painted here. They were too cumbersome to be carried away, and he was in dispair as to what disposition to make of them, when he noticed that ——— was getting up a mixed sale of foreign pictures. He dropped in and said to the dealer: "I have a large lot of pictures I would like to put on sale with you. They are by Von Dobb, and are first-class." "Von Dobb, eh?" said the auctioneer. "You don't say so! Why, I don't believe we have a Von Dobb in the collection." "I'm pretty sure you haven't, for these are the first of his that have come to America. I'll send them in to-morrow." And he did, and got better prices for them than he has yet begun to command for his canvases under his own name. This is a pointer for some of our young artists who can hardly realize enough on their pictures to pay for the canvas and colors.

The Department of State has been informed that the Italian government desires to invite the artists of all nations to compete in furnishing designs for a national monument to be erected at Rome in honor of King Victor Emmanuel II. The monument is to consist of a bronze equestrian statue of Victor Emmanuel and of a base at least thirty meters wide and twenty-nine meters high in its central portion. Its height elsewhere is to be at least twenty-four meters. The base is to consist of an architectural design in any form that may be selected by the artist. The steps leading to the esplanade on which the monument is to be placed will be considered part of the monument. Plans may be sent in from November 15 to December 15, 1883. A royal commission will decide upon the design, and the successful artist will be entitled to receive 50,000 francs as a prize, and 50,000 francs additional will be divided by the commission among the most meritorious competitors. The ground plan of the site where the monument is to be constructed can be seen at the Department of State, where additional information on the subject can be obtained by artists desiring to compete in offering designs. In the first competition Mr. Henry L. Gay, of Chicago, was one of the competitors. His design received the second highest vote on the first polling, and on the final award received honorable mention.

Exposition of Railway Appliances.

PROBABLY the largest exposition of mechanical apparatus under the head of "railway appliances" ever given in this or any other country is about to be held in Chicago. The exposition building is being prepared for the event and the date of commencement is set for May 24, to continue until June 23. The following circular will explain more fully the purpose of the exposition and give the names of the prime movers.

CHICAGO, March 20, 1883.

To the Civil, Mechanical, Hydraulic and Mining Engineers of North America:

The Commissioners of the National Exposition of Railway Appliances invite your attention to the proposed tests of the strength and quality of substances used in general construction, to be made during the Exposition, from May 24 to June 23, 1883.

That these tests may be full and complete and of an extended and varied character, engineers who contemplate visiting the Exposition, are solicited to bring with them or send specimens of useful substances for the purpose. A record of these tests will be faithfully kept and afterward published. It is to be hoped that all who can will avail themselves of the opportunity to learn the quality and strength of the material you build with in your respective localities, and without expense to yourselves.

Suggestions from Engineers or others, which will promote the efficiency of these tests, are respectfully solicited.

Special working forms of iron and steel are solicited, especially those which are subjected to constant or severe strains or blows.

A first-class prize will be given to the manufacturer producing, by actual test, the best and strongest upset eyebar and upset rod for threading.

Specimens of stone should be in cubes of two inches.

Stone cubes from old structures which have been exposed to unusually deleterious influences, are requested.

Specimens of useful wood of which no tests have been recorded, are requested.

A written description of each specimen sent for testing, including a full account of the mode of manufacture, must accompany it; otherwise no test will be made.

If the specimen is of metal, name the ore it is made from and describe its manufacture and purpose.

If a stone specimen, give the date when quarried (unless from an old structure and not known), kind of stone and the location of quarry, naming the town, county and state.

If a wood specimen, give the date of felling the tree of which it is a part, the common name of the wood, also botanical name if known, the average diameter and height of the species; state whether it is deciduous or perennial, and what, if any, useful purpose it has served in its native region.

All wood specimens should be of the following dimensions: for tensile strength two by two inches by three feet long; for compressive strength six by eight inches by one foot long.

Specimens of rope made from steel or iron, or from manilla, hemp or any vegetable substance, also of belting of every description, are solicited.

WM. SOOY SMITH, C.E.,
K. F. BOOTH, C.E.,
W. F. GOODHUE, C.E.,
WM. H. LOTZ, M.E.,
CHESTER B. DAVIS, Hydraulic Engineer,
WM. SOOY SMITH, *Chairman.* *Committee.*

Address all correspondence, specimens, etc., to
E. H. TALBOTT, Secretary,
Grand Pacific Hotel, Chicago.

As soon as practicable the INLAND ARCHITECT AND BUILDER will contain full reports of the tests in stone and other materials of interest to builders and civil engineers.

Our Illustrations.

PAGE 35, RESIDENCE AT EVANSTON, ILL.; BUILT FOR L. D. NORTON, ESQ.; E. Baumann, Architect. This style of residence can be built for about $20,000. The basement is built of stone, and the walls are frame veneered with brick and a crested deck-roof. The design is modern Renaissance in style. The ground plan is 64 by 60 feet. The house contains twenty rooms and twelve large closets. These include the basement, containing laundry and servants' room; the first floor, containing the library, reception-room, parlor, sitting-room, dining-room, kitchen and a servants' room, beside the china closet, etc. The second floor contains a family chamber, guest chamber, four other chambers, a sewing-room, beside two bathrooms and nine closets. The house is built among large forest trees overlooking Lake Michigan, and is perhaps the finest residence yet built even in a suburb somewhat noted as Evanston is for its fine residences.

The illustration on page 36 is a reproduction, sketched by the artist Rosenberg, of the elegant invitation issued by the Art Guild upon the occasion of their last reception.

PAGE 39, A DESIGN FOR A HALL; by the decorative artists Messrs. Healy & Miller. The design can be used in original construction, or can serve as a guide in remodeling a large hall in a Western home. The principal feature is the arrangement of the staircase, which ascends between the columns of a Renaissance "loggia." It is intended that the wood finish be of oak, colored dark, and the walls hung with relief papers. The hangings are to be of jute velours, in deep oriental colors, with tinsel braid trimmings. The windows should be mullioned and have stained glass in the upper sash. It is intended that papier mache relief ornaments, metalized, should be introduced in the treatment of the ceiling panels.

PROF. Schliemann's house is one of the sights of Athens. It is built of white marble and adorned with numerous statues of the same material. He and his wife talk ancient Greek together, and have called their two children Andromachi and Agamemnon. Around the Professor circulates a large body of erudite Germans. The Teutonic element is omnipotent in the Hellenic capital.

Special Correspondence.

CINCINNATI.

CINCINNATI, April 17, 1883.

Editor of the Inland Architect and Builder:

Regarding the building interests, I have to report that the outlook is very favorable.

Greatly to the profit of our building fraternity what might be denominated a big building boom is in full swing here. Since my last letter the Board of Public Works have granted permits to erect new buildings aggregating several hundred thousand dollars. Building is not, however, confined to private dwellings, though these are going up in large numbers, both of frame and brick, mostly in the suburbs. Cumminsville, the extreme northwestern part of the city, is enjoying a large share of the boom, and this despite the fact that the whole place was under water during the flood, and is likely to be so again, should we ever be visited by another such a supply of water. The most extensive and costly improvements are being made in the central parts of the city. The Emery Brothers have in hand an eight-story stone front on Fourth street, east of Walnut, which will cost $40,000, and a four-story brick on Pearl street, between Race and Elm, which will cost about $18,000.

The Spring Grove Cemetery Association will soon put up a four-story brick on Fourth street, between Main and Hammond, which will cost $20,000. It will be used as an office building.

During the summer the Queen City Club will spend $10,000 in improvements on their handsome club-house, located at the corner of Seventh and Elm streets.

Messrs. Louis Stix & Co., a prominent dry goods firm of this city, are building a seven-story brick on Union street, between Race and Elm, which is now nearly completed. It will be connected with the central house of the firm (which covers the block from Third street to Union) by a bridge crossing Union street. the cost of the new buildings is named at $20,000, but in all probability it will be much greater.

Mr. David Sinton, who is our wealthiest millionaire, and one of our most extensive builders, is erecting a five-story brick on Fourth street—Nos. 98 and 100—which will have cost, when completed, in the neighborhood of $40,000.

Another improvement on Fourth street will be a handsome three-story brick, which Mr. Martin Bare will put up at the junction of Fourth, Ludlow and Lawrence streets. The cost is estimated at from $15,000 to $20,000.

Mabley & Co., the clothiers, are building a stone-front addition to their mammoth store on Fountain Square.

Messrs. Bruggeman & Co. are erecting a three-and-a-half-story brick on Clay street, between Twelfth and Canal, costing $10,000.

A three-story stone-front residence is being built on Richmond street, between Mound and Cutter, by Mr. E. Moch, which will be a fine specimen of architecture when completed. The estimated cost is $10,000.

Mr. Fred Helle is building a four-story brick, which will cost the same sum, at the northwest corner of Liberty and Central avenue.

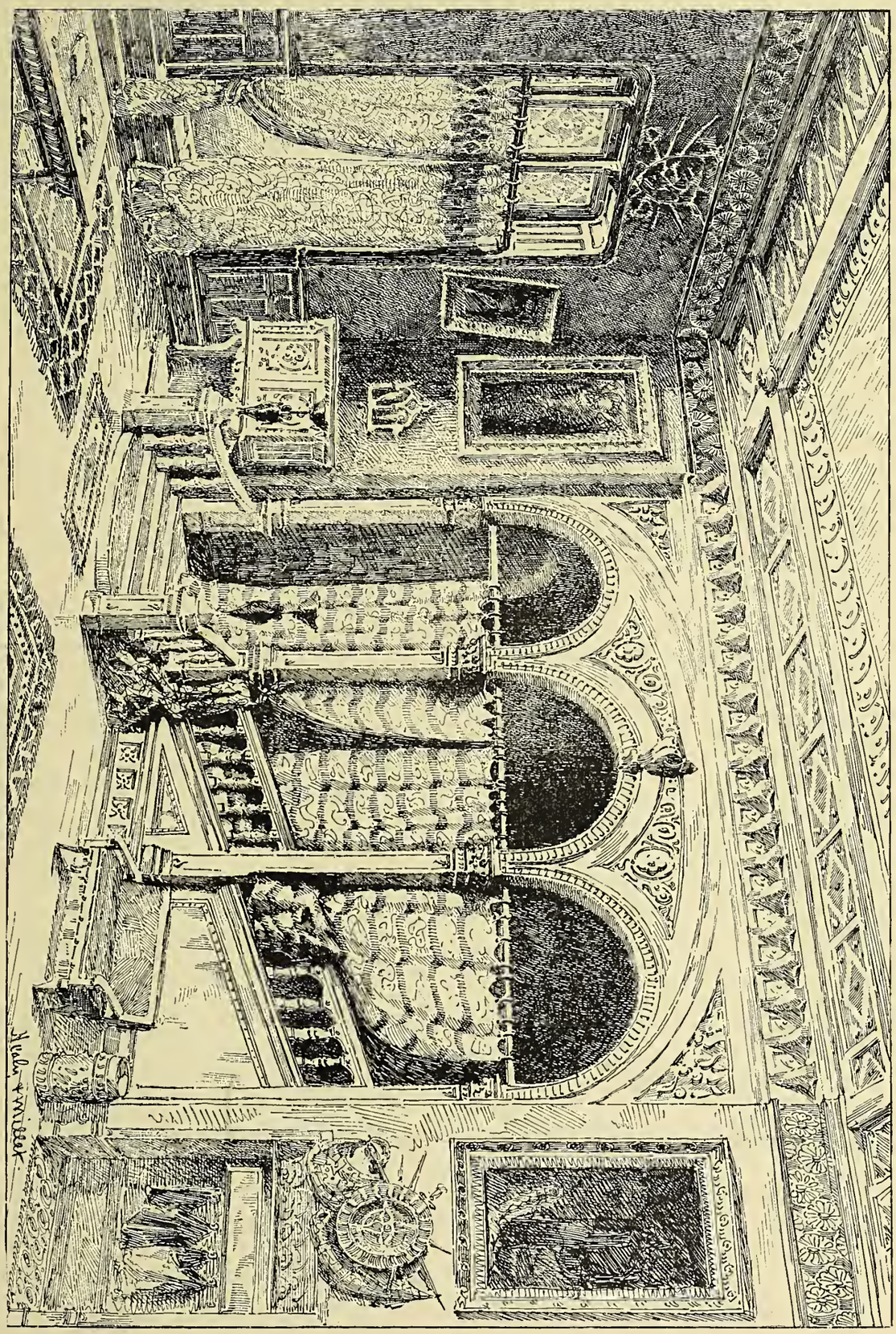
Mr. George D. Winchell is going to build a brick factory, four stories, to cost from $25,000 to $30,000, at the corner of Bank and Riddle streets.

The old Freeman Avenue car stables have been purchased by the Mosler & Bahmann Safe Company, and they intend to build a mammoth safe-works on the site.

The Messrs. Schaller Brothers, well-known brewers of this city, are building a three-story brick addition to their brewery on Main street, north of Liberty, which will cost $8,000.

Other improvements are: Four one-story bricks, by the Eckstein White Lead Company, cost $10,000; parsonage for the St. Matthew's Church, a two-story brick on Liberty street, between Elm and Logan, to cost $4,500; row of small bricks on Linn street, by Mr. John H. Empson, to cost $10,000 or $15,000; four-story brick at Nos. 535 and 537 Central avenue, by Messrs. Aufdembrinke & Co., to cost $10,000; and three-story brick on Dunlap street, near Stark, by Messrs. Harig & Bruggemann, costing $8,000.

These are but a few of the buildings in process of erection or projected. There never was a time in the history of Cincinnati when so many improvements were in progress. C. M. A.



DESIGN FOR A HALL INTERIOR.

DETROIT.

Detroit, Mich., April 15, 1883.

Editor of the Inland Architect and Builder:

We are now fairly in the midst of the biggest building boom that has struck Detroit for a decade. Every architect in the city is brimming full of business, and many are so overrun with work that they are obliged to import draughtsmen from other cities to enable them to complete their plans within the specified periods of time. One firm of architects alone have forty-seven different jobs in hand, divided as follows: thirty-two residences, five factories and ten stores.

The greatest demand prevails just now for a superior class of dwelling-houses, and owners generally are meeting this demand half-way, and, as a consequence, we see that in most of the plans being prepared for this class of structures, cost is a secondary consideration to handsome design and a desirable arrangement. Many elegant and costly residences are projected for erection on Woodward avenue and other prominent residence streets. Factories and warehouses are being erected or remodeled and improved in various parts of the city, while costly and handsome hotel structures are going up, or will be erected on some of the leading business thoroughfares. An approximate estimate of the value of the work that will be done, without including the new postoffice or the new depot of the Michigan Central railway company, is (in a recent issue of the *Free Press*) placed at a round $5,000,000.

The following list of buildings (for which Wm. Scott & Co. are the architects) will give you some idea of the situation:

First on the list comes a seminary for the Detroit branch of the order of the Sisters of the Sacred Heart at Grosse Pointe. It is to be erected on a plat of land just west of the Catholic church at Grosse Pointe, having a frontage of 600 feet on the street, and extending back to the channel bank on Lake street, Claire. The design will be old colonial. The cost will be $80,000 or more. Several contracts for materials, work, etc., have already been placed.

Residence for Thos. Ladue, on Edmund street, $15,000.

Residence for Wm. H. Hull, Woodward and Forest avenues, $27,000.

Residence for Wells W. Leggett, Woodward avenue and Davenport street, $48,000.

Alterations to old Wallace homestead for Capt. Stevens, $18,000.

Alterations to the residence of C. R. Mabley, $15,000.

Residence for Alex. Grant, on Second avenue, $5,000.

Residence for Alfred Wood, on Garfield avenue, $7,200.

Residence for Frank Irwin, on Garfield avenue, $6,500.

Residence for Wm. H. Rathbun, on Davenport street, $15,000.

Sketches (in competition) for the Thompson Home for Old Ladies, $25,000.

Five dwelling-houses for George Doolittle, on Sproat street, near Woodward avenue, $6,000 each.

Two dwelling-houses for the Adams estate, northeast corner of Woodward avenue and Brady street, $15,000.

Store for Farrington & Co., Nos. 151 and 153 Jefferson avenue.

Three stores for Daniel Scotten, in Springwell.

Residence and barn for W. H. Hopkins, on Woodward avenue, $60,000.

Residence of Frederick Marvin, Charlotte avenue and Second street, $10,000.

Mortimer Smith and W. E. Brown have prepared plans for the entire reconstruction of the Buhl block, next to the postoffice. Other plans prepared by them are for a new block at Nos. 161 and 163 Jefferson avenue, for James Burns and John Owen, and numerous residences.

Mason & Rice are the architects for the following residences and buildings:

Residence for George L'Hommedieu, Peterboro street, $12,000.

Residence for David Carter, northeast corner of Woodward avenue and Warren street, $12,000.

Remodeling residence for Henry C. Parke, corner of Woodward avenue and Fremont street.

Residence for Frank Preston, corner Cass and Canfield avenues.

Residence for George Hitchcock, Farwell, Mich., $5,500.

Residence for Robert Mitchell, of the Robert Mitchell Furniture Company, Cincinnati.

Remodeling residence for the Detroit Club, on Fort street.

New boiler shop for Stephen Pratt, Foundry street (railroad crossing).

New Methodist chapel, northeast corner Selden and Cass avenues.

Addition to Eagle Iron Works, Woodbridge street west.

New factory for Union Yeast Company, corner of Orchard and First streets.

Gordon W. Lloyd has prepared plans for a new block on the site of St. Andrews' Hall, for Mr. F. A. Parker.

Architect Meyers has designed the plans for a dwelling-house on St. Aubin avenue, for the Rev. D. M. Cooper, to cost $12,000.

Messrs. Donaldson & Meier are among those architects who are brimful of work, as the following list will show:

Dwelling-house for S. M. Cutcheon, John R. street, near Edmund street.

Public school building at Ann Arbor, $11,000.

Residence of the Alpha Delta Phi Society, Ann Arbor, $12,000.

Unitarian parsonage at Ann Arbor, $4,000.

Store and dwelling for H. May, St. Aubin avenue and Clinton street.

Unitarian church, Mt. Pleasant, Mich.

Unitarian church, Big Rapids, Mich.

Remodeling residence for C. F. Moore, St. Clair, Mich.

Episcopal chapel (stone building) on Medbury avenue, Detroit.

Bank and office building, corner of Ouellette and Sandwich streets, Windsor.

Brick warehouse and stores, four stories and basement, 100 by 30 feet, for the Posselius Bros., Gratiot avenue and High street.

Brick barn for R. Gillis, Alfred street. Builder.

ST. PAUL AND MINNEAPOLIS.

St. Paul, April 16, 1883.

Editor of the Inland Architect and Builder:

The demand for houses in St. Paul, as the season advances, increases to almost alarming proportions. People experience the greatest difficulty in renting suitable residences. A vast number of new dwellings are projected, and still, with the hundreds of new-comers arriving daily, those who are able to arrange for their occupancy, when completed, deem themselves exceedingly fortunate. There is at this time an imperative need for at least one thousand new dwellings.

The *Pioneer-Press*, in its issue of April 3, says: "The number and value of business blocks to be erected in St. Paul this season will surpass those of any previous year in the history of the city. There will be over fifty-one structures, having a frontage of 4,211 feet, and costing at least $2,029,000." In this estimate, according to the *Pioneer-Press*, no buildings were taken where work has progressed above the foundations.

The following is the list:

Nick Gross, three-story brick block on Seventh street, near Seven corners; 60 feet frontage on Seventh, running through to Fifth; 90 feet frontage on Fifth	$ 35,000
Mr. Justice, next 50 feet frontage on Seventh street to Gross', 3 stores, probably run through to Fifth	20,000
Mr. Mayo, Seventh street, near St. Peter, 50 feet frontage	6,000
George Mitsch, 50 by 80 feet, three stores, corner St. Peter and Seventh	25,000
Dr. Wharton, corner Third and Franklin streets, 60 by 65 feet, three-story brick block	12,000
H. L. Dousman, Third street, next to Paul Faber's, 50 by 100	15,000
J. L. Forepaugh, old Winslow house site, corner of Eagle, Third and Fort streets, brick block of eight stores, three stories, 163 by 114	40,000
Judge James Gilfillan and Charles Faber, 120 feet front, corner of Chestnut and Fort streets, three stores	20,000
Charles H. Eaton, corner of Fort and Chestnut streets, 60 feet front, three stories, brick	20,000
D. A. Robertson, corner of Fort and Sherman streets, 80 by 80, three stories, four stores	18,000
Four brick blocks, each three stories, in vicinity of Fort street and Seven corners, plans out, but names and location withheld, aggregate cost at least	80,000
F. Knauft will erect one of the finest blocks on East Seventh street, east of Jackson, at a cost of not less than	40,000
E. F. Drake is excavating for a five-story brick block on Fourth street, between his large block and Oppenheim's, 75 feet front, estimated cost	100,000
Improvement of the Rogers block, on Bridge square	25,000
Bircher & McGrath's three-story brick block, 50 by 75, on Bridge street	20,000
Schroeder & Weyh's carriage repository, on Seventh street, 50 by 60, two stories	8,000
Watson & Rice, 27 by 79, southeast corner of Jackson and Fifth, four stories	20,000
Charles Lockhardt's improvement of block at the northeast corner of Third and Sibley streets	30,000
Quinby & Hallowell's carriage works (contemplated), on Minnesota street, between Eighth and Ninth	15,000
C. M. Dittman's (contemplated) improvement, southwest corner of Robert and Fourth streets	30,000
Hallow & McWinney, three-story brick, corner of Dakota and Cory streets	12,000
Kelly & Shepard's warehouse, on Third, between Olive and John streets, 90 by 200, three stories, brick	30,000
Maj. Espy and C. M. Dittman, (contemplated) four-story brick, on Fifth, between Jackson and Robert, 100 by 150	40,000
Rudolph Vollmer, three-story brick, on Martin Street, 47 by 125	15,000

J. M. Wild, three-story brick, corner Seventh and Bedford, 50 by 75	10,000
Taylor & Craig's four-story brick, on Fifth, near Fort	18,000
Dries' four-story brick, corner of St. Peter and Ninth	15,000
Sherman's four-story brick, corner of Eighth and Wabasha	15,000
M. M. Flint, 50 by 120 (contemplated), on Fourth, between Wacouta and Rosabel	50,000
Kittson & McKenney's improvement on Wabasha street, between Fifth and Sixth streets, five stories	80,000
Commodore Davidson's Grand Opera House	100,000
Commodore Davidson's five stories, 50 by 100, corner of Fourth and Cedar streets	45,000
J. H. Davidson's five stories, 50 by 150, frontage on Fourth, near Cedar	45,000
Commodore Davidson's three stories, 50 by 65, frontage on Fourth, between Wabasha and Cedar	50,000
P. Herzog, four stories, 50 by 80, corner of Fourth and St. Peter	25,000
N. W. Kittson's four-story brick (projected), corner of Seventh and Robert streets	60,000
Four stores, brick, northwest corner Robert and Sixth streets	25,000
Davidson's Arcade, fronting on Fourth, Robert and Fifth, six stories, including hotel at corner of Fifth and Robert	175,000
D. C. Shepard's five stories, 50 by 150, frontage on Third street, next east of Shepard's block	50,000
Dennis Ryan's five stories, 100 by 130, northwest corner of Third and Wacouta streets	100,000
Mrs. J. E. Thompson's five stories, 66 by 130, frontage on Third street, between Sibley and Wacouta	60,000
J. W. Bass, five-story brick, southwest corner of Robert and Sixth streets (projected), 50 by 150	35,000
German-American Bank, corner of Robert and Fourth, five stories, 100 by 150	150,000
Herman Greve's five-story brick, southwest corner of Fifth and Wacouta, 100 by 130	80,000
H. F. Thompson's brick block, corner of Sixth and Broadway	25,000
First National Bank, four stories, corner Fourth and Jackson, 50 by 100	90,000
Noyes Bros. & Cutler, five stories, 70 by 130, on Fifth, between Wacouta and Sibley	60,000
J. L. Forepaugh, brick block (contemplated), corner of Seventh and Kittson streets	30,000
Total value	$2,029,000
Total frontage	4,211 feet

MINNEAPOLIS.

Work on the West Hotel building is being pushed with all possible speed, nearly one hundred men being employed on it now, and work will soon be resumed on the Johnson building. Work on the Chamber of Commerce building was resumed over a week ago, and is being pushed with vigor.

There is a lively demand for dwellings all over the city, and architects are busy as bees in a hive getting out plans for these, which are to cost all the way from $1,000 up to $10,000, with a few considerably above the latter figure.

The structure at Lake Calhoun known as the Pavillion is being converted into an extensive hotel, and will be called the Lyndale. It is to be operated during the summer as a family hotel, and will be accessible to the business part of the city in half an hour by the "motor." It will contain accommodations for two hundred guests. The rooms will all be of good size, and generally command handsome views of the surrounding country, including the chain of lakes. The house will be ready to receive guests by June 1. The entire building will be heated by steam, lighted by gas and furnished in first-class style, with all modern improvements.

Mr. Joseph Menard will build a four-story brick on First avenue south, and, it is stated, has already received an offer for its rental by a large jobbing house.

The Harmonia Society is negotiating with T. F. Andrews for the erection of a building for the use of the society, which is to be supplied with a public hall.

A house is to be built by Mrs. Adair, some time during the season, on Tenth street. It will cost $5,000.

L. H. Mattison is to build a three-story brick barn, 58 by 102 feet, on the corner of Second avenue north and Seventh streets, for the use of his omnibus business.

Messrs. Kees & Fusk are preparing plans for a church for the Pilgrim Congregational Society, to cost $10,000. It will be built on the corner of Lyndale avenue and Fourth avenue north.

Mr. W. P. Roberts is to build an $8,000 residence on Nicollet avenue and Fifteenth street.

The Ware block, on upper Washington avenue, which was recently partially destroyed by fire, is reported ready to be reconstructed, and work on it will begin at once, under the superintendency of Mr. Will E. Steele. It will be adapted to the jobbing trade.

The *Pioneer-Press* is authority for the following items:

John Orth, who owns the greater part of the upper end of Nicollet Island, is preparing to build on the property a series of houses, probably not less than twenty, of the same general style and grade as those in the Eastman rows. The improvement will follow the laborious work of quarrying the stone on the site.

It is proposed to construct a grand boulevard connecting Minneapolis and St. Paul.

On the 9th inst. a formal agreement was signed by Mr. Dennis Ryan embodying the proposition to build a hotel at St. Paul, costing for ground and building not less than $750,000, provided a bonus of $200,000 be subscribed by the citizens of St. Paul, the amount to be paid only after the building shall be completed. It is also a condition that the subscription must be made by April 30th next.

St. Paul.

ST. LOUIS.

St. Louis, April 18, 1883.

Editor of the Inland Architect and Builder:

It can hardly be said that we are enjoying a building boom at present, but nevertheless quite a large number of improvements are under way or projected. Superintendent Cameron expects that the new government building will be ready for its occupants and the public before the close of this year, and everything is being conducted with that object in view. Two draughtsmen, sent on by the treasury officials on the 9th inst., have made the drawings for all the various pieces of furniture needed in the different rooms. Each room requires a peculiar furnishing, and the furniture will be designed with regard to the formation of the room and adequacy to the purpose for which it is intended to be used. Bids will be advertised for the coming week.

The Board of Public Improvements held a meeting on the 5th inst., and the following list of estimates and bids (culled from the *Republican*) will show the importance of the business transacted.

The committee on improvement of streets and alleys reported an estimate for the new work of the years 1883–4.

Streets, bridges and culverts, $161,800, itemized as follows: Eighteenth street bridge: ironwork, $110,000; floor, $25,000; railing, $9,000; total, $144,000. Twelfth street bridge: reconstruction of southern approach, $7,000; iron railing, $1,900; total, $7,900. Watson road bridge over the River des Peres, iron superstructure, $3,000. St. Louis avenue bridge over River des Peres, $2,000. Repairs of old Manchester road bridge over River des Peres, $1,100. National Bridge road bridge, $1,000. New Manchester road bridge, $800. Shaw avenue bridge, $1,200. Olive street bridge, $800. Street improvement fund, $50,000; street reconstruction, $50,000.

The report was filed and certified to the comptroller.

The committee on sewers reported the amount of money necessary for sewer construction during the coming year, recommending an appropriation of $180,000 in addition to the $30,000 appropriated last year for the extension of Mill creek sewer and transferred for other purposes.

It is desired that $130,000 be appropriated for the Mill creek sewer and $80,000 for other sewers.

Four petitions were received from as many portions of the city, requesting an additional supply of water-pipe.

Bids for the reconstruction of Third, between Walnut and Pine streets, were received from W. R. Allen, $13,323.20; P. F. Stifel, $18,883.35. For reconstructing Third from Pine to Vine street, W. R. Allen, $15,336.25; P. F. Stifel, $20,869.75.

NOTES.

W. S. Stuyvesant is about to build a $5,000 dwelling on Chestnut street, near Ewing avenue.

H. M. McChesney will erect a $10,000 dwelling on Chestnut street, near Channing avenue.

Mr. R. H. Newberry is erecting a brick dwelling-house on the side of Marcus street, between Brillante and Easton avenues, to cost $4,200; also two brick dwellings on the east side of Garrison avenue, between North Market and Montgomery streets, to cost $6,900.

The pottery works of Messrs. Dixon & Young, which were recently burned down, will be rebuilt at an estimated cost of $20,000. They will be located on the north side of Ferry street, between Hall street and the Mississippi river.

Miss Mary Dicke is about to erect two adjacent brick tenement houses on the north side of St. Louis avenue, between Twentieth and Twenty-first streets, to cost $8,000.

The estimated cost of the furniture for the new custom-house will be $125,000.

F. W. Still is about to erect two brick tenements on Evans avenue, between Vandeventer and Sarah avenue, to cost $5,000.

The receipts of lumber here since the first of the year have been greater than at any time during 1882. The country is calling for a large volume of lumber, owing to the great number of emigrants coming from the East.

E. L.

DES MOINES.

Des Moines, Ia., April 16, 1883.

Editor of the Inland Architect and Builder:

The scarcity of brick is greatly retarding the building boom, but by the first of May a full supply will be forthcoming.

In the haste of writing our former letter, we neglected to mention the contemplated improvements in the United States post-office building, the present structure being of the *Mulletonian* period, and cost Uncle Sam $200,000, and is already in a state of disintegration and decay. $45,000 has been appropriated to repair the dilapidated structure. Capt. F. S. Whiting is to superintend it.

The State Capitol building, which has been in course of construction for the last eight years, is now approaching completion. The late A. H. Picquenard made the original plans, and since his death the building has been in charge of two of his former pupils, Messrs. Bell & Hackney. The staging has recently been removed from the dome, revealing some fine decorative work of the French school by the same artists that have given the Springfield Capitol such a notoriety. The commissioners expect to have the senate and assembly rooms ready for occupancy for the next session of the State Legislature. The building has greatly exceeded in cost the original estimates, and will likely reach $3,000,000 before completion, but down to the present time has escaped the mortifying history of the Springfield Capitol in the way of investigations into the acts and doings of its builders and officers.

The new First National Bank building, of which Messrs. Bell & Hackney are the architects, is to be finished in red brick with red terra-cotta trimmings, furnished by the Northwestern Terra-Cotta Works, True, Brunkhorst & Co., proprietors, of Chicago. The Clapp block, Foster & Libbie, architects, will be finished with red brick and buff terra-cotta trimmings by the same terra-cotta company.

Among the new buildings projected since our last letter are the following: Business block for Messrs. C. W. Rogg and Dr. Detshon, a resident of Indianapolis, to be of Philadelphia pressed brick and stone trimmings, estimated to cost $20,000; residence for B. S. Harding, to cost $30,000, Bell & Hackney, architects; residence for J. S. Polk, built of Iowa red sandstone, to cost $35,000; block of stores and offices for C. H. Atkins, of brick and stone, to cost $15,000; John S. Kidd contemplates the erection of a fine residence, to cost $25,000.

Foster and Liebbie, architects, have in hand the following: A residence for Geo. Sneer, Esq., now building of wood, cost $10,000; a residence for G. W. Randall, cost $9,000; stores for A. Newman, cost $12,000.

B. J. Bartlett & Son, architects, are now finishing a residence for Daniel Ewing, Esq., cost $9,000; and are making plans for a dormitory building, to be called Cotton Hall, for Central University at Pella, Iowa, to cost $12,000; also plans for a Congregational church at Cheyenne, Wyo., to be built of native stone, to cost $15,000.

Wesley Chapel M. E. church have decided to build a $20,000 church edifice the present season, the plans of which are now being prepared. The Des Moines, Osceola and Southwestern Railroad, and the C., B. & Q. Railroad have both signified their intentions of building new depots. Des Moines now has nine railroads, and two more coming this year. At present there are six different depots, but our citizens are clamoring for a Union depot, as there is but one good building in the lot, and the tracks of the different roads nearly all run parallel, and there is a great deal of reason in the demand. De Moin.

Marshalltown, Iowa, has recently voted $45,000 to build two new schoolhouses, plan for which are now being prepared.

The Architecture of Minneapolis.

In a recent newspaper letter the architecture of Minneapolis is thus described by Miss Ella A. Giles: "The people here have exhibited rare taste and skill in the erection of buildings, both public and private. The extreme beauty of the natural scenery in the vicinity of Minneapolis has no doubt had its influence upon the minds and taste of the inhabitants, causing them to exercise unusual care in the construction of business blocks, churches, schoolhouses and private dwellings, so as to secure the most desirable and artistic effects. The city being located on land possessing a rolling surface, there is naturally a great diversity of sites upon which to erect the various structures. This has involved a greater variety in the style of architecture than is generally found in cities. Much skill has been manifested in the adaptation of buildings to the sites selected for them. Styles peculiar to certain situations have been carefully studied and fine effects produced. Some buildings are all front with scarcely any attractions in the rear; others have several fronts. All have more or less individuality, and few cities are so free from monotonous groups of houses planned alike. Both in design and color there are delightfully independent buildings. The Western spirit asserts itself in refreshing conceits of prettiness and quaintness that are shown in the modern dwellings, and some of the solid and showy business blocks have dared to illustrate the originality of their owners character. There are freaks of form, curiosities of color, and occasionally a suggestion of wildness in the windows which appear in the most unexpected places, and are of themselves, in their endless variety, a most entertaining evidence of the Minneapolitan eagerness to see all that passes, and by visual and all other fair means absorb everything progressive and beautiful into this city's own 'inner consciousness.'"

Are Plastered Ceilings Obsolete?

Modern architecture, says a correspondent, in its relation to modern discoveries of new material and the skill of artisans in the use of old material under improved conditions, both in a utilitarian and decorative view, seems to demand something of a departure from ancient methods of constructing and ornamenting buildings. Weight of material where it does not serve to strengthen or elaborate a design, must certainly be considered obsolete in architecture. In this connection it might be well to consider the impropriety of using plaster ornaments for decorative purposes. In their representation of the vegetable kingdom they are not and can not be true to nature in any proportionate comparison, except it may be its facial outlines. In elaborating architectural beauty or engineering strength, the same may be said with the added detraction that the more we elaborate the more we weaken the structure. Consequently the application of plaster to ornamentation is by some designers but a lingering relic of unskilled artisans, and should, they think, have no place in architectural construction, except as a modeling convenience. They reason that with the skill now being applied in the use of metals and woods of various kinds, even plaster ceilings should be considered as but a temporary and imperfect method of inclosing rooms.

Building Notes.

E. F. Goble, the well-known contractor and builder, has returned from the Hot Springs much improved in health, after an absence of two months.

Mr. Geo. E. Weir, of the well-known firm of Austrian & Weir, manufacturers of mirrors and pier-glasses, bought out his partner's interest on the 7th inst., and will hereafter continue the business alone.

The contract for building the substructure of the Ashland bridge was awarded to H. Fox & Co. on the 14th inst., and the work was begun on the 15th. It will be finished in five or six weeks.

No less than a dozen persons have been arrested and fined in various sums, during the past twenty days, for violation of the building ordinance. This is as it should be. Let the good work go on.

Architect Van Osdel has prepared plans for a $13,000 residence, to be built at Fortieth street and Ellis avenue, for Mr. Samuel Baker. The interior will be finished with mahogany and ebonized woods.

John C. Cochrane has prepared plans for the following buildings: Porter county, Ind., court-house; brick, with stone trimmings and stone porticos; size, 88 by 118, two stories and basement, and to cost over $100,000.

The first kiln burned in the new works of the Northwestern Terra-Cotta Works was taken out on the 17th inst. The burning was a complete success, the product being superior to any terra-cotta before turned out in the West.

Mr. E. Baumann has prepared the plans of a factory for the Jarre Manufacturing Company. It will be located at the southeast corner of La Salle avenue and Ontario street, and will be five stories high, including the basement. The area will be 31 by 100 feet.

Architect Thomas is preparing the plans for six cottages for Mr. F. C. Baldwin, at Lake View; also two flat buildings for Morley & Ransdell, on West Adams street, west of Western Avenue, to cost $8,000, and to be built of pressed brick with stone trimmings.

Architect Cass Chapman has prepared plans for the following: The German Methodist Church building, Portland Avenue and 28th street; also a block of stores and flats at Rockford, Ill., for Perry & Lake. The latter will be built of St. Louis pressed brick, stone trimmings, and will be 67 by 94 feet on the ground.

The permit to erect a nine-story building on the southwest corner of Michigan avenue and Adams was issued on the 17th to the Pullman Palace Car Company, to be occupied by their general offices. The building is in the hands of Mr. S. S. Beman, the well-known architect of Pullman, and will be a handsome and substantial addition to our city buildings.

Architect Pierce has the following plans completed: One for two dwellings, two-story stone fronts on Vernon Avenue, near 30th street, for D. W. Jackson. Five three-story and basement dwellings on Chestnut street, near Chicago Avenue; one three-story and basement house on Cass street, one three-story and basement dwelling on Rush street, and two-story brick flats on Henry street.

Fire-Marshal Swenie having notified the Board of Underwriters that the firemen were unable to cope with fires in those buildings that are supplied with iron shutters, because those above the first story are not made in compliance with the city ordinance, which provides for an arrangement by which they can be opened from the outside in case of necessity, the Board, on the 14th inst., notified the architects, builders and manufacturers that all shutters hereafter put on buildings must conform to the standard designated by the Board and the city ordinance.

The Tobey building, corner State and Jackson streets, has, under the supervision of architect W. L. B. Jenney, been thoroughly remodeled and with its broad halls, well lighted apartments, and fine interior finish, is one of the best office structures in the city. It will be ready for first of May occupants. The property is owned by L. Z. Leiter and the improvement covers about $80,000. Architect Jenney is also adding two stories to the Sears building, 99 and 101 Washington street. The improvement will also include new elevator and other conveniences and will cost $20,000. Also the remodeling of the wholesale establishment of B. F. Norris & Co., jewelers, at 29 East Washington. All these improvements are to be completed May 1.

The patents covering different departments of construction and their active application in buildings, by B. R. Hawley, of Chicago, are deserving of considerable praise. They consist of a floor-warming and ventilating system and system of heating by air radiators, a system of construction which takes for its principal the thorough exclusion of air exeept through its proper channels, and an improved laundry dryer and conveyor which supplied by the waste heat from the kitchen range, is a matter of small expense and a boon to any family. These systems are noticeable in the construction of flats for P. J. Sexton, corner of Chicago avenue and Cass street, and Chas. E. Hyde, corner of Jackson and Paulina, the private residence now being built by Mr. Leo Schmidt and others.

Architect Hansen has prepared plans for the following buildings: Three-story flats, Trenton pressed brick, brown stone trimmings, for Mrs. Daegling, to cost $14,000; store and flats, four-story and basement, 25 by 75, on Indiana street near Franklin, for A. J. Lund, to cost $9,000. Five dwellings, for five different parties on West Indiana street, each three stories and basement, the whole to cost $38,000. One dwelling on Milwaukee Avenue, near Wicker park, to cost $7,000. One two-story building on Milwaukee Avenue, near Ohio street, to be built of Trenton pressed brick and terra-cotta and stone trimmings, cost not stated. Work will also soon be resumed on the English Lutheran Trinity Church, corner of La Salle and Evans street. This architect has also in preparation plans for a factory on Curtis street, near Kinzie. It will be four stories high, and will be 100 by 60 on the ground. Mr. L. Hansen is the owner. Two story flats in Lake View, for Mrs. Anderson, to cost $3,000; one two-story residence in Wieker park, for Mr. Stensland, to cost $4,000; one for Mr. O. P. Olson, two-story and basement flats, in Wicker park, to cost $4,500; and a residence for Dr. Quales, two-story and basement and attic, Trenton pressed brick with stone trimmings, in the same location, to cost $10,000.

Architect Hallberg has prepared plans for the following buildings:

Residence for J. M. Griest, Lake avenue, near Thirty-ninth street, 50 by 26; cross-gable 37 feet long, with tower and slanting roof, veranda and conservatory. The house will be built of Indiana pressed brick, Lemont stone trimmings, and pilaster-trimmed throughout. It will contain nine rooms and bath and linen rooms and closets. Cost, $8,000.

Residence for Robert Linblom, on La Salle avenue, near Eugenie street, 58 by 45; green stone front and side; two stories, basement and attic; to cost, including stables of pressed brick, $25,000. Prominent features of this house will be the large entrance halls and center hall, with doors leading out on the veranda and into the conservatory; the arrangement of library and parlor, which are to be built with octagonal gables, with oval window-mantles between the chimney-flues, and large colored plate-glass on the landing of the stairway leading to the second floor at the back part of the hall. It will also contain all modern improvements, including bath and dressing-rooms, with a play-room and billiard-room in the attic.

House in Lake View for John Enauder; frame cottage, with brick basement, 30 by 50; to cost $3,000.

Residence for General A. L. Chetlain, on Dearborn avenue, near Elm street; brown stone basement and Baltimore pressed brick front, with brown stone trimmings. The house will be three stories and basement. Style of architecture, modern Gothic, slate roof, arch and gables, pilastered throughout. Dimensions, 25 by 65; ten living rooms and linen and bath-rooms, large closets, etc. The cost will be about $9,000.

The success of an architect's plans depends very much upon what construction you put upon them.

Chicago Building Permits.

The following permits for buildings to cost $2,000 and over, have been issued since the 1st of April:

Jno. Bock, two-story brick dwelling, 21 by 67 by 28, 862 Twenty-first street	$ 3,200
Peter Platt, two story dwelling and store, 23 by 80 by 30, Thirty-ninth street and Ashland avenue	4,000
Gorman and Costello, two-story brick flats, 44 by 40 by 30, 3841 and 3843 Wentworth street	5,000
J. H. Hunter, two-story brick dwelling, 22 by 32 by 24, Central Park near Ogden street	3,000
H. Rumsfeld, three-story basement and attic brick flats, 49 by 88 by 52, 171 and 173 Sedgwick street	20,000
S. R. Howel & Co., two-story brick office, 26 by 46 by 24, Thirty-fourth street and Iron	2,800
Fred Grimsell & H. Dresselhaus, two-story brick dwelling, 24 by 55, 95 and 100 Fowler street	10,000
J. F. Abel, two-story brick dwelling, 20 by 50 by 20, 3800 Dearborn avenue	2,000
J. M. Allen, three two-story brick flats, 25 by 37 by 27, 1326 to 1330 West Lake street	9,000
Anna Halsted, two-story cellar and attic brick dwelling, 40 by 52 by 40, 490 Belden avenue	15,000
S. E. Gross, nineteen one-story brick cottages, each 20 by 32, Illinois avenue near Thirty-second street	19,000
Chas. F. Grey, four-story and basement store, 20 by 100 by 50, 131 Michigan street	10,000
John M. Schroeder, two-story brick dwelling, 21 by 50, 499 Chicago avenue	3,000
St. John's church, two-story and basement brick dwelling, 22 by 52, 457 West Superior street	4,300
W. G. Hibbard, two story and basement brick dwelling, 24 by 80 by 30, 1616 Prairie avenue	15,000
D. Schmidt, two-story brick dwelling, 22 by 33 by 23, 368 Orchard street	2,000
M. F. Peterson, two story and basement brick dwelling, 22 by 53 by 35, 200 West Thirteenth street	4,000
E. Nadelers, two story and basement brick dwelling, 22 by 50 by 36, 1282 North Halsted	4,500
Henry McGurren, two-story brick dwelling, 20 by 45 by 24, 28 Osborn street	2,000
Henry McGurren, two-story brick dwelling, 20 by 56 by 24, 11 Osborn street	2,100
J. A. B. Waldo, two-story brick factory to dwelling, 20 by 30, 110 Fremont street	
Mrs. C. McCanley, three-story and basement brick dwelling, 20 by 38 by 40, 19 Waldo Place	4,000
Mrs. Bell Day, two-story brick flats, 21 by 43 by 34, 96 Lull Place	2,500
P. Hursen, two story brick flats, 75 by 50 by 25, 87 to 93 North Oakley street	6,000
P. Hayes, two-story brick flats, 20 by 40 by 22, 775 Superior street	2,000
H. H. Gardner, two-story basement and attic brick dwelling, 23 by 74 by 44, 20 Walton Place	12,000
H. H. Gardner, two-story brick barn, 21 by 50 by 30, rear 20 Walton street	2,500
John Wiese, three-story brick dwelling, 20 by 66 by 46, 3564 South Halsted street	6,000
Thos. Hayne, four-story brick store, 18 by 75 by 70, 243 South Water street	4,500
Western Electric Company, four-story and basement brick factory, 250 by 50, 251 Clinton street	80,000
John Moran, two-story brick dwelling, 20 by 40 by 24, Forest avenue	4,000
W. F. Birch, six four-story and basement brick stores and flats, 119 by 70 by 56, 272 to 282 North Clark street	36,000
C. F. Messenger, two-story brick barn, 29 by 50 by 24, 521 Fulton street	2,700
M. Curtin, two-story brick dwelling, 20 by 35 by 24, 3839 Wentworth street	2,000
R. Hanish, two-story brick dwelling, 21 by 52 by 32, 1071 Monroe street	3,500
N. W. Parlor Suit Manfg. Co., three-story basement, factory and boiler room, 40 by 70 by 151, 200 cubic feet, Clybourne avenue and A street	5,000
E. S. Brewer, three two-story brick dwellings, 50 by 50 by 25, 188 to 188½ Walnut street	6,000
Monroe Frank, three two-story brick dwellings, 44 by 54 by 26, 21 to 31 North Elizabeth street	8,000
John Slapak, two-story and basement brick dwelling, 20 by 54 by 30, 647 Center avenue	3,500
Thomas Hughes, two-story brick dwelling, 20 by 44, 251 May street	3,000
Peter Hemmerston, two-story brick dwelling, 24 by 30, 115 Twenty-first street	2,000
C. E. Watkins, two-story and basement brick dwelling, 25 by 36 by 32, 103 West Eighteenth street	3,500
A. O. Laughlin, two-story brick dwelling, 20 by 40 by 26, 662 West Twentieth street	2,800
Mary Whonley, two-story brick dwelling, 21 by 45 by 26, 705 West Twenty-first street	2,400
C. V. Waite, two-story brick dwelling and store, 36 by 50, 2620 and 2622 State street	6,000
R. Lindblom, two-story basement and attic brick dwelling, 58 by 40, 678 La Salle avenue	20,000
Wm. M. Kumerling, two-story brick dwelling, 21 by 53, 328 Rumsey street	3,000
J. L. Campbell, three two-story brick dwellings, 72 by 32, 889 to 893 Polk street	7,500
J. L. Campbell, three two-story brick dwellings, 54 by 30, 64 to 68 DeKalb street	7,500
Henry Kurz, two-story brick dwelling, 20 by 25, 172 Newberrylin street	2,500
R. H. Moulton, two-story brick dwelling, 25 by 70, Monroe, near Leavitt street	5,000
Nels Johnson, three-story and basement brick flats, 22 by 45 by 42, 120 Sedgwick street	4,000
H. H. Gage, three-story brick flats, 44 by 44 by 36, Lewis, near Webster street	7,000
P. Rosmusson, two-story brick dwelling, 23 by 48 by 24, 742 Superior street	2,000
S. Dutchke, one-story and basement brick dwelling, 22 by 60 by 24, Daskieel and Thirty-first streets	2,500
Jno. Kirk, two-story brick dwelling, 20 by 32 by 22, 2818 La Salle street	2,500
Jno. Reisch, two-story and basement brick flats, 20 by 60 by 34, 1650 Dixon street	4,000
Pullman Palace Car Co., nine-story and basement brick offices and flats, 120 by 170, southwest corner Michigan and Adams streets	500,000

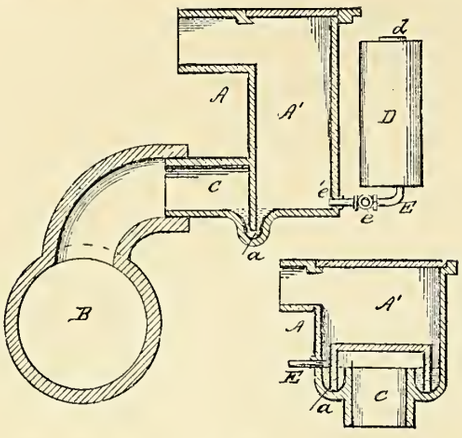
Eighty-six permits were issued for buildings to cost from $200 up to $1,500. The total number of permits issued was 144, aggregating $1,686,450. The one having the greatest value attached was that for the Pullman Palace Car Company, $500,000.

A lady in a neighboring city, whose husband had remodeled the front of their residence, while the rear was badly dilapidated, said the front of her house was Queen Anne and the rear Crazy Jane style.

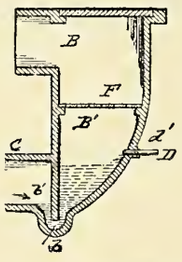
To encourage house-building Vienna does not tax a structure for mercantile or residence purposes until twenty-eight years after it is built. That would hardly be an inducement here. We would willingly pay the taxes if we could escape paying for the building.

New Patents.

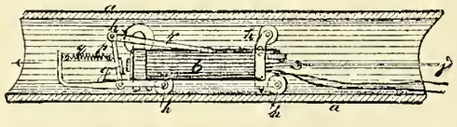
The following new patents were recently issued to Western inventors:



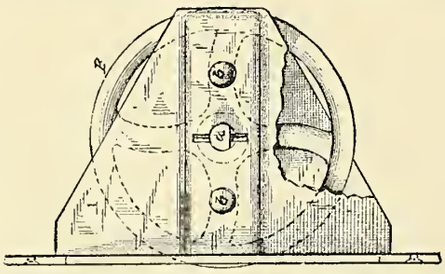
274,465. Sewer-inlet. Edward Z. Collings, Camden, N. J., and Charles F. Pike, Philadelphia, Pa. *Brief.*—A tank holding disinfecting material and a pipe-connection between it and the sewer-trap, whereby a seal of the disinfectant may be provided.



274,466. Sewer-inlet. Edward Z. Collings, Camden, N. J., and Charles F. Pike, Philadelphia, Pa. *Brief.*—A pipe from a water-main opens into the sewer-trap for supplying a continuous flow of water thereto. Also, the back pressure of the gas is opposed or balanced by a constantly increasing pressure of the column of water in the trap when the mouth of the sewer is closed by the rising tide.



274,818. Motor for drawing wires through tubes. William J. Philips and George L. Kitson, Philadelphia, Pa., assignors to said Philips. *Claim.*—The electro-magnet *b*, provided with anti-friction wheels, as described, and the armature *g*, provided with a spring, *q*, and elastic prongs *r r'*, and means for attaching a line or wire to said magnet, the whole constituting a motor for drawing through tubes or conduits a light thread or wire, in the manner and for the purpose substantially as set forth.



274,831. Sash-cord guide. James Shannon, Washington, D. C. *Claim.*—A guide for sash or other cords, consisting of a sheave, removable axis, and a support, with a series of bearings, to any one of which the axis may be adjusted, substantially as and for the purpose set forth.

P. Yoe, Cincinnati, assignor to Indicator Lock Company, Bloomington, Ill., indicator lock.
Anton Zweibel, Burlington, Wis., horizontal windmill.
Samuel G. Wallace, Keokuk, Iowa, electric generator.
J. W. Webster, Monticello, Ill., flue-stop.
John F. Martin, assignor to Martin Electric Wire Conducting Company, Chicago, insulating compound for electrical wires.
E. Hays, Clear Lake, Iowa, water-proof paint.
A. S. Hibbard, Milwaukee, assignor to Western Electric Company, Chicago, circuit for telephone exchanges.
J. Fischer, Quincy, Ill., refrigerator.
J. DuShane, South Bend, Ind., bolt for chilled moldboards, also electric arc lamp.
E. G. Durant, Racine, Wis., and T. Kane, Chicago, opera chair.
G. Cassady, Flint, Mich., feed water heater.
J. H. Coon, Des Moines, Iowa, lightning conductor.
F. D. Moses, Indianapolis, apparatus for the manufacture of illuminating or heating gas.
R. T. Greene, Sauk Center, Minn., hook for suspending ladders.
S. S. Burr, Winetka, Ill., interconvertible crib and table.
J. A. Guest, Burlington, Iowa, store shelving.
John McGuire, Milwaukee, water-closet valve.
Joseph B. Allen, Springfield, Ill., electric arc lamp.
Angus K. Campbell, Newton, Ia., apparatus for heating and ventilating rooms.
George Clark and W. J. Taylor, Marinette, Wis., steam set-works for saw-mills.
James Dutot and H. B. Anderson, Newton, Ia., steam-balanced valve.
William J. Edwards and G. B. Durkee, Chicago, Ill., assignors to said Edwards, grading and ditching machine.
John H. Edward, Stillwater, Minn., separator for portable steam engines, also secretary.
Jesse Z. Friend, assignor of one-half to U. A. Ager, Perrysburg, Ind., brick and tile kiln.
Joseph T. Haines, Balbec, Ind., portable elevator.
Isaac Hodgson, Indianapolis, Ind., pneumatic alarm lock for jails.
Samuel E. Jarvis, Lansing, Mich., steam engine.
Joseph B. Kennedy, assignor of one-half to J. M. Almon, Princeton, Ind., fire-escape.
Michael W. Mahar, National Military Home, Ohio, assignor of three-fourths to J. M. Patterson, Windfall, Ind., sash-fastener, also pocket-book and fare-box.
John F. Martin, assignor to Martin Electric Wire Conducting Company, Chicago, Ill., conduit for electrical wires.
Daniel Wilde, Washington, Ia., steam generator.
Henry Winter, Hanover, Ill., hand-saw attachment.
William W. Richardson, Indianapolis, Ind., saw-handle.
Henry J. H. Schutt, Detroit, Mich., alarm lock.
Harvey Cockell, Chicago, assignor to C. Chambers, Jr., Philadelphia, Pa., kiln for drying brick, etc.
M. C. Crawford, Terre Haute, Ind., screw-driver.
C. H. Douglass, Chicago, circular saw.
William Goddard, Chester, Ill., elevator.
N. A. Ransom, assignor to Chicago Gas Apparatus Manufacturing Company, Chicago, apparatus for carbureting gas.
O. E. H. N. Reichling, assignor of one-half to G. H. Stuart and C. E. Ernest, Marion, Ind., wrench.
J. G. Stevens and E. E. Meeker, Belvidere, Ill., revolving show-case.
Myrah Walker, Port Huron, Mich., flexible pipe-joint.
Eugene H. Benoist, St. Louis, Mo., window refrigerator.
George Clark, Marinette, Wis., steam feed-marks for saw-mills.
George T. Clark, Delmar, Ia., socket for fence posts.
Madison Dagger, Newtown, Ind., fence.
Haskett D. Eastman, Minneapolis, Minn., fire-escape.
Henry L. Ferris, Alden, Ill., hay elevator and carrier.
James Kirkham, Milwaukee, Wis., window-cleaner.
Philo J. Lockwood, Auburn, Ind., door-brace or stay.
Emil Severin, Andora, Ind., metallic roofing.
Francis H. West, Milwaukee, Wis., steam-trap and boiler-feeder.

Trimmings and Shavings.

Pavicini & Co., iron-workers at Basle, Switzerland, have failed for several million francs.

Cleveland is building a Music Hall which will have a seating capacity of 4,300, the total cost of the building to be $60,000.

An insurance adjuster from Cincinnati, after thorough investigation, reports the loss on the Newhall House $140,000, and on its contents $31,000. The Cincinnati companies involved will settle on this basis.

A novelty in framing is resorted to in the case of a very beautiful painting upon embroidery canvas, which is mounted upon a background of plush, and attached to it by gold cords fastened at the corners in a tie. The plush, projecting on all sides, forms the frame, and this method is at once novel and effective.
add Building Notes.

China possesses the longest bridge in the world. It is at Lagang, over an arm of the China Sea, and is five miles long, built entirely of stone, seventy feet high, with a roadway seventy feet wide, and has three hundred arches. The parapet is a balustrade, and each of the pillars, which are seventy-five feet apart, supports a pedestal on which is placed a lion, twenty-one feet long, made of one block of marble.

A new industry in Japan is said to be that of lacquering plaster in a way which causes it to resemble marble. On a basis of clay this lacquer-work is especially novel. The clay is baked after the fashion of porcelain, and the hardness and ring of the material combine with the skill of the lacquerer to produce a result only distinguishable by the expert from marble itself. An excellent mantel-piece of this description may be obtained, says the *Japan Mail*, for about $25.

A new method of treating stained glass has been invented by a Boston artist, by which a jewelled effect is produced and a harmonization of colors and tints, which is said to be superior to anything yet seen. The cost is much less than the original leaded work, it being possible to produce an effect for $5 per square foot that would cost five times that amount by the present method. So says the inventor, and his assertion has been supplemented by competent judges. A patent is about to be issued, and the public given full opportunity to investigate its merits.

A number of prominent Lutheran clergymen of Washington city, New York and Baltimore have issued an appeal to the people of their denomination throughout the country for funds to erect in Washington a colossal bronze statue of Martin Luther. It is proposed to purchase for this purpose a duplicate of the figure of the great reformer which stands in the center of the celebrated group in Worms, and to erect it in front of the Lutheran Memorial Church in Thomas circle between Fourteenth street and Vermont avenue.

The government method prescribed for cleaning brass, and in use at all the United States arsenals, is said to be the best in the world. The plan is to make a mixture of one part common nitric acid and one-half part sulphuric acid in a stone jar, having also ready a pail of fresh water and a box of sawdust. The articles to be treated are dipped into the acid, then removed into the water, and finally rubbed with sawdust. This immediately changes them to a brilliant color. If the brass has become greasy, it is first dipped into a strong solution of potash or soda in warm water; this dissolves the grease, so that the acid has free power to act.

"As Others See Us."

The Inland Architect and Builder has issued its second number, and it equals the first.—*Chicago Inter Ocean.*

A new Chicago monthly, The Inland Architect and Builder, has made its appearance. The initial number is very attractive.—*Chicago Evening Journal.*

The Inland Architect and Builder, published monthly in Chicago, is replete with matter of interest to builders and people interested in building, including a number of architectural designs.—*South Bend, Ind., Evening Register.*

The Inland Architect and Builder is the title of a publication just started in this city, the first number of which we have received. It presents a very creditable appearance that gives earnest of enterprise and thrift.—*The Indicator.*

A new candidate for journalistic favor is The Inland Architect and Builder, published in this city by the Inland Publishing Co. It is to be published monthly, and the first number is very attractive and well edited.—*Saturday Evening Herald.*

There has been started at Chicago a valuable and useful paper called The Inland Architect and Builder—a paper which is of decided merit, and will undoubtedly do a great work for the good of the West and its architecture.—*Iowa State Register, Des Moines.*

We have received the initial number of The Inland Architect and Builder, Chicago. It is well edited, and a good specimen of typography. It is devoted to construction, decoration and furnishing, published at $1 per year.—*Painters' Magazine, New York.*

Chicago has a new monthly journal called The Inland Architect and Builder, devoted, as its title indicates, to architecture, building and decoration. It fills a want long felt in the West, and will undoubtedly become a standard publication.—*St. Joseph, Mo., Daily Herald.*

The Inland Architect and Builder, devoted to architecture, construction, decoration and furnishing in the West, is a Chicago publication. It is beautifully printed, and filled with well written articles bearing upon architecture, building and decoration.—*Joplin, Mo., Herald.*

The Inland Architect and Builder has issued its first and second numbers. It appears in bright, clear type and has a model arrangement of news and record matter. It numbers some of the leading architects and builders among its regular contributors, and has handsome illustrations.—*Chicago Times.*

The Inland Architect and Builder.—The first number of this journal, monthly, has made its appearance in this city. It will be devoted to architecture, construction, decoration and furnishing in the West. It presents a pleasing appearance typographically, and gives promise of doing good work in its field.—*Sanitary News, Chicago.*

The Inland Architect and Builder, devoted to architecture, construction, decoration and furnishing in the West, is a Chicago publication, the first number of which we have received. It is beautifully printed, and filled with well written articles bearing upon architecture, building and decoration.—*Southern Lumberman, Nashville, Tenn.*

We welcome the advent of a new and very tasty publication entitled The Inland Architect and Builder. The paper is to be issued monthly, and gives promise of being a very interesting and instructive journal. We congratulate the publishers on the appearance of their first number.—*The Watch Maker and Metal Worker, Chicago.*

The Inland Architect and Builder is a monthly journal devoted to architecture, construction, decoration and furnishing in the West. It is very handsomely printed, contains engravings of recent beautiful specimens of architecture, and should receive a very liberal support from those interested in its specialty.—*Daily Quincy, Ill., Herald.*

The Inland Architect and Builder has reached its second number, and maintains the favorable impression made by the first. It is handsomely gotten up, and contains a number of interesting articles by skilled writers. Correspondents in the principal cities furnish summaries of buildings begun or contracted for; and the "Notes" include the more important theme of interest to architects and builders.—*Chicago Tribune.*

The Inland Architect and Builder, though a new venture, is full of valuable hints and common-sense suggestions about that most important of all subjects at present, the building of homes and structures for general purposes. It deserves success, and will probably achieve it. The Inland Publishing Co., 17 Tribune Building, Chicago.—*St. Paul Pioneer-Press.*

The Inland Architect and Builder made its bow this week to the Chicago public, and a graceful and dignified one it was. The well edited monthly is exceedingly neat in appearance, and the contents are fresh and judiciously selected. The publishers, the Inland Publishing Company, should make a success of their venture if it is kept up to its first promise.—*Chicago Inter Ocean.*

The Inland Architect and Builder is the title of a new Chicago monthly devoted to architecture, decoration and furnishing. The first issue is exceedingly promising, being very handsome in appearance, and containing a variety of interesting and valuable information. The editorials are pithy, and show an evident appreciation of the journalistic field in which the new paper has just entered.—*Industrial World, Chicago.*

The Inland Architect and Builder is the title of a monthly publication just issued here in the interests of general architecture. It contains many valuable articles on artistic architecture and interior decoration. It is published by Messrs. L. Muller, Jr., and R. C. McLean, the latter being managing editor. Typographically it is one of the handsomest of the many publications of this city.—*Chicago Correspondence Louisville Courier-Journal.*

The Inland Architect and Builder is the name of a new monthly journal published at Chicago, and devoted to architecture, construction, decoration, furnishing and the kindred arts. It is got up in an exceedingly neat and tasteful manner, contains much that is interesting, novel and useful, and is well illustrated. Its mechanical make-up is excellent, and it is published at the very moderate price of $1 a year.—*Brick, Tile and Metal Review, Pittsburgh.*

The Inland Architect and Builder.—This journal is beautifully printed on toned paper. The table of contents is comprehensive, and each department is admirably edited. Following the editorials is the first number of what must prove an interesting series on "History of Chicago Architecture," by John M. Van Osdel. Other papers of equal interest follow this. There are also a number of illustrations, which include the general offices of the C. B. & Q. R. R. Co., and a church at Riverside, Ill.—*Daily State Gazette, Green Bay, Wis.*

The first number of The Inland Architect and Builder, "a monthly journal devoted to architecture, construction, decoration and furnishing in the West," has been published at Chicago, and the February number, which is upon our table, is a beautiful example of neatness in typography, and has also much interesting letter-press. The price of the publication has been placed at the low sum of $1 per year, and its success would seem to be only a question of time.—*The Furniture Trade Review and Interior Decorator, New York.*

The Inland Architect and Builder is the title of a monthly journal, the first number of which has just made its appearance at Chicago. Its title indicates the field it is intended to occupy—architecture and architectural decoration. It is beautifully printed on toned paper, and is a marvel of typographic excellence. It is edited with judgment and ability; does not "slop over," as too many Western papers are apt to do, and is filled with useful and interesting information. L. Muller, Jr., is manager, and R. C. McLean is the managing editor. We shall be glad to hear of the success of the new journal, which we have good reason to know is in the very best hands.—*Hamilton, Ont., Spectator.*

Vol. I. No. 1, of The Inland Architect and Builder is before us, and it presents a very neat and tasty appearance. The contents have been carefully selected, and are pungent and to the point. The editorial department is full of good sense and sound suggestions. One full-page illustration is given of the new Calumet Club-house, and for which—from an artistic point of view—too much praise cannot be given. We wish the new journal every success.—*Builder and Woodworker, New York.*

New Publications.

THE BUILDER'S GUIDE AND ESTIMATOR'S PRICE BOOK, being a compilation of current prices of lumber, hardware, glass, plumbers' supplies, paints, slates, stones, limes, cements, bricks, tin and other building materials. Also prices of labor and the cost of performing the several kinds of work required in building, together with prices of doors, frames, sashes, stairs, mouldings, newels and other machine work. To which is appended a large number of building rules, data tables and useful memoranda with a glossary of architectural and building terms. By Fred T. Hodgson, editor of The Builder and Woodworker, Industrial Publication Co., New York.

The title of this book is in itself a complete index to its contents. It deals with all the practical questions of construction, and that in an able manner, furnishing to the carpenter a glossary of practical information that is invaluable, and in the small space allotted has really condensed facts and figures that might with fitness fill volumes. It covers in its estimates not only the construction but the decoration and repairing of dwellings, and as a hand-book for builder, real estate owner, or insurance adjuster, it cannot be too highly recommended.

CAMERON'S PLASTERER'S MANUAL. Revised edition. Containing accurate descriptions of tools and materials used in plastering. Description of the appearances and action of the various limes and cements. Instructions for making mortar and for doing all kinds of plastering; cistern building; form of contract; useful table of receipts; important suggestions, cautions, etc., with illustrations. By K. Cameron. William T. Comstock, New York, publishers.

The practical directions and suggestions contained in this work are nearly all enumerated in its title. The plasterer will find it as far as it goes, and it goes far enough for all the ordinary requirements of plastering, a very useful and reliable work.

THE CARPENTER'S STEEL SQUARE AND ITS USES, also by Fred T. Hodgson.

This book has reached its second edition, a fact which testifies to the estimation in which it is held by those who use the square. It is a clear, brief, and accurate description of the square and its uses in obtaining the length and bevels of all kinds of rafters, hips, groins, braces, brackets, purlins, collar-beams and jack-rafters, and also its application in obtaining the bevels and cuts for hoppers, spring mouldings, octagons, stairs, diminished stiles, etc. The work is amply illustrated by over seventy woodcuts in illustration of its teachings, a feature which greatly adds to its value as a trade manual.

THE MODERN HOUSE CARPENTER'S COMPANION AND BUILDER'S GUIDE. By W. A. Sylvester. A. Williams & Co., Boston, publishers.

This work is designed to cover all the practical questions commonly met with both in the preparation of material by the workman and those in the line of estimates, etc., for the contractor. As a publication the work is most comprehensive but savors of a long apprenticeship by the author to the architect's drafting-board rather than with the framing-square and jack-plane. But the language is clear and each measurement carefully noted and the field covered as comprehensively as would seem possible in the brief work. It is a work that will fill the place of many volumes upon special subjects and must be a valuable addition to any mechanical library. The paper and typographical appearance of the work is worthy of special mention,—it is excellent. Price $1.25.

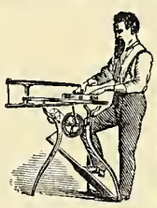
Exchanges Received.

The Decorator and Furnisher, New York; *The Mississippi Valley Lumberman*, Minneapolis, Minn.; *The Painters' Magazine*, New York; *Building*, New York; *The American Furniture Gazette*, Chicago, Ill.; *American Architect and Building News*, Boston, Mass.; *The Watch-Maker and Metal-Worker*, Chicago, Ill.; *The Sanitary News*, Chicago, Ill.; *The Carpet Trade and Review*, New York; *The Furnisher*, Chicago, Ill.; *Dubuque Trade Journal*, Dubuque, Iowa; *The Carpenter*, New York; *The Artist*, London, Eng.

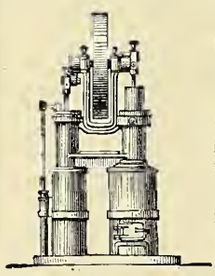

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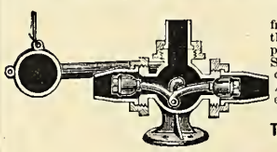
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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 4

MAY, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE ONE DOLLAR PER YEAR.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

Letters containing the latest building news and gossip from St. Louis, St. Paul, Detroit, Cincinnati and other points will be a prominent feature, and correspondence is invited from architects and builders throughout the country.

The aim of this Journal is to become the medium of communication between those in whose interests it is published. Matters of news and valuable facts appropriate to this Journal will be promptly published and proper credit given.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

IMPORTANT TO SUBSCRIBERS.

As unauthorized parties are collecting subscriptions on our account, subscribers should insist upon agents showing credentials from this office or from responsible subscription and news companies.

TWO notable events are dated to occur on the 24th instant. One of great local interest is the formal opening of the East River suspension bridge at New York. This great and unrivaled feat in bridge engineering has been watched by the public and lauded or adversely criticised by the press since its conception, but now it is finished and the people of two great cities are joined, to the benefit of each, and the bridge will stand one of the wonders of the century.

Perhaps creating a greater, more universal interest is the great gathering of railway appliances in International Exposition at Chicago. The great Exposition building is not near adequate to contain all the machinery and other exhibits, but for two blocks south of the building temporary structures have been erected for their further accommodation. One of the more important results of the gathering of mechanical appliances will be the tests of stone, iron, and other materials by the testing machine sent here for the purpose by the Yale Lock Manufacturing company, of Stamford, Connecticut. These will be very exhaustive and the results will be fully described in a future issue.

THIS exposition of railway appliances will bring together perhaps the greatest collection of railway construction and equipping material ever exhibited. The capacity of the building has been increased by numerous additions to an area of 500,000 square feet, and tracks will be laid along the lake front for experiments with rolling stock. An electrical railway will be placed in operation showing the advancement electricians have made with electricity as a motive power. The exhibit will be divided into eight departments alphabetically arranged, each department comprising an entire branch of railway appliances. In thus bringing together in competitive display all those appliances which form the safety and the elegance of the cars in which we ride, and in displaying the marvelous genius of this century, this age of steam and iron, the managers have done a work that deserves well of the city so much favored. Chicago is the railway center of the continent, and the enterprise which has always marked her lesser ventures will certainly stamp this as the greatest special exhibition ever given of the products of the mechanical world.

PLEASANT words, full of encouragement, come to us from our able and honored contemporary, The *American Architect and Building News*. In a recent editorial it kindly says:

> We owe an apology to two of our contemporaries for having allowed some weeks to elapse before saying what we might to welcome them to the field of technical literature. The *Builder* * * * The other new-comer is the INLAND ARCHITECT AND BUILDER, published monthly in Chicago by the Inland Publishing Company, and containing primarily such information in regard to local building matters as may be most acceptable to the profession in that busy place. It is surprising to see how much matter of this kind there is, and it is pleasant also to observe the skill and care with which it is sifted and arranged. The editorial paragraphs in the two numbers which have so far appeared seem to us of unusual value and interest, and we take pleasure in congratulating the profession in the West upon the high character of the journal which promises to represent it.

These words are particularly welcome as we have been awaiting with considerable interest an expression from this high and conservative source. That it is an expression of approval is to us doubly gratifying.

ZUÑI, that wonderful little city planted among the sand wastes of New Mexico, and the strange people who inhabit it, have come before the notice of the great American people in several ways of late, but always with credit to themselves. Mr. Cushing's interesting paper running through the recent numbers of *The Century*, with his interesting descriptions of their house-construction and general habits has given them some notoriety and placed them in a favorable light before the people. Now an officer in the United States army, a relative of a well-known senator has looked upon their small territory and tried to appropriate its most valuable quarter. Among these sand-hills are two springs and in the survey which gave the limit to the reservation set apart by the government for them to occupy forever, this most valuable section was left out. The president's attention was called to the matter, and these people whose architecture is different from that of all other tribes of men, and whose intelligence seems to have existed from some far-off age of enlightenment, if not of civilization, have been reinstated and can now rest secure. The Zuñis have in their solid walls the evidences of having stood changeless through the centuries and it certainly should give them an uncontrovertible right to the country they call theirs, for beside their city walls, memorials of forgotten ages, our great civilization is but the passing of a caravan of gypsies, the coming and going of a day and night.

TWO months have passed of as fine building weather as Chicago has ever experienced, and with as fine a building prospect as was ever presented, in total inactivity, because ignorant men have become strong enough to hold the wheels of its progression. And the bricklayers' union is deserving of no sympathy whatever. In January they notified the contractors of their desires. On the second of February Mr. Prussing, the secretary of the builders' association, proposed the appointing of a committee for the purpose of arranging matters permanently for the season. This overture was rejected, and so have been all others that have been made by the master builders up to the present time. That the strike has been wholly unadvised and only resulted from the thorough ignorance of the heads of the union, is evidenced by the fact of their utter rejection of all overtures for a settlement from the master builders. The end, however, is near. First, every day the strike is continued brings foreign bricklayers to Chicago, and they are at once given work. There are already more stone-masons in the city than can be used; and, second, the Trades' Assembly, who have been active in supplying money to the strikers, will, because of their continued refusal to try to meet the builders and bring about an amicable settlement, refuse to farther contribute to their support, and this will bring even the most obstinate to their senses. We are glad to see the reputable architects and owners joining with the contractors in this great issue, and hope the principle so long fought for will be so thoroughly established that it will be many years before Chicago is again troubled by a strike in any class or trade. We only sympathize with the poor families of these men, who will suffer in the coming winter by the loss of the work of the past two months.

THE thorough lawlessness which has characterised many of the actions of the striking bricklayers' union, has taken from them much of the sympathy they were at first presumed to be entitled to by fair-minded people. As an example, when the blank contract which was to be signed by the masters' executive committee and a committee from the bricklayers' union was read before the union, a dozen members moved to "lay the paper under Mr. Prussing's table," thus declaring that they would have nothing to do with the appointing of a committee, or make a move toward an arbitrative settlement.

WHO is Fred Kelterneck, "architect"? A man giving that name, and claiming to be an architect, offers "to furnish plans for buildings to contracting firms composed of members of the bricklayers' union at $20 and $25 each." Aside from the questionable propriety of offering aid to would-be contractors, who in many cases are not even good bricklayers, the unprofessional manner of bidding for work at such reduced rates, leads sensible people to believe that the "architect's" plans are expensive at even "$20 to $25" a set. Echo answers, "Who is he?" for his name is not even to be found in the city directory.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART III.

MAN first existed in the savage state. Forced to struggle for an existence with the wild beasts of the period, the mammoth, the rhinoceros, the cave-bear; to obtain food and to shelter himself from the weather, he employed his superior intelligence and invented weapons of defense and for hunting.

The first great starting-point in man's industry was the use of fire; with fire he could cook his food, warm his body, fell trees, harden the points of his spears, toughen the withes used to bind around sharp stones to form hatchets, bake his crude pottery and keep off the ferocious animals while he slept at night.

The next step in civilization was the hut, the origin of architecture. The cottage, the mansion, the palace, the temple, the church, the tomb, are all modifications of the hut; therefore the study of the hut is an introduction to the study of architecture.

With the nomads the hut must be portable, and consisted of skins drawn over poles, as in the wigwam of the Indian, or of the tent of skins or of canvas.

These can be carried on pack animals, pitched or taken down and packed in a short time, and is as much of a home as is allowed to a family subsisting solely on a few domestic animals, for they must often change their abode to seek fresh pastures.

The most primitive fixed habitation was probably the hut built of logs notched together at the ends, with a roof of same material, brought to a ridge or peak by shortening the logs at each course, and filling between them with clay mixed with straw. The chimney, if any, was a hole in the roof.

Another form of the primitive hut which was probably used in the mountainous regions of central Asia, consisted of walls of stone laid in clay, with a flat roof of logs, covered with clay, mixed with straw, and well pounded while wet.

In the extreme North the huts are made of sods and stones, plastered with mud, they have a semi-spherical shape with a single opening at top, to serve the general purposes of door, window and chimney.

The requirements are very simple, solely a protection from excessive cold. When these huts are buried in snow and occupied by a family, a little fire of peat or small sticks will preserve the temperature within the limits of possible endurance.

In the Soudan, in Africa, Denham and Clapperton in 1824 reached a place so infested by flies and bees that the

inhabitants could not move out of their houses during the day. As these insects will not enter very dark places, nearly absolute darkness as a protection from these pests was the requirement above all others to be satisfied. Their houses were literally formed one cell within another, five and six in number. They give no drawing of these huts, but they were probably of thatch, so common in Africa, which allows some light to penetrate the walls, hence the necessity of so many envelopes.

This form of building the hut is of course very local, but it serves as another example of that great principle that the form of the building grows out of the requirements modified by the material at hand, and the degree of civilization of the builders.

As another example let us examine the Malay hut in the Philippine and neighboring islands, situated within the tropics, in the region of earthquakes and those fearful gales known as typhoons, one of which has only within a month divested a large part of the city of Manila. The requirements are therefore strength to resist a vigorous shake and a fearful blow, and to be cool under a scorching vertical sun.

The rains are at periods severe, and tidal waves roll over the low shore lines. Reptiles and insects and wild animals are numerous. These create a requirement that the floor of the house shall be well up above the ground.

As the Malay does not read nor write, very little light is required.

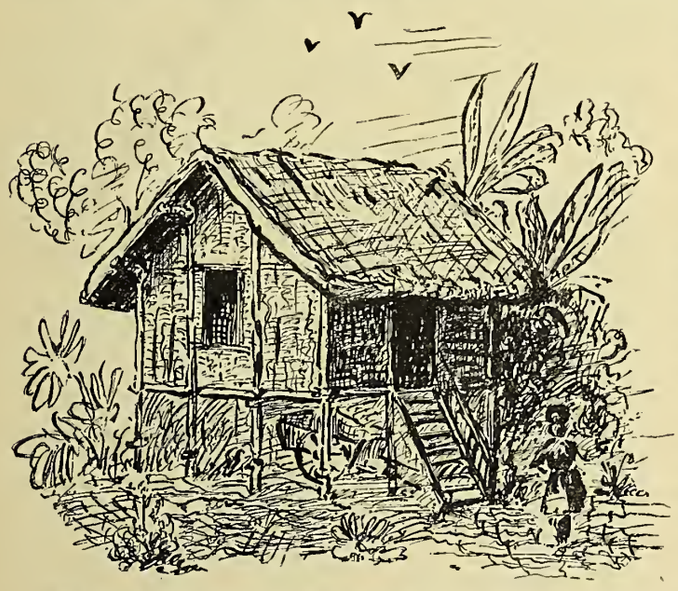
As the cooking is done out of doors, there is no chimney to the house.

The available materials are tree trunks for posts and timbers.

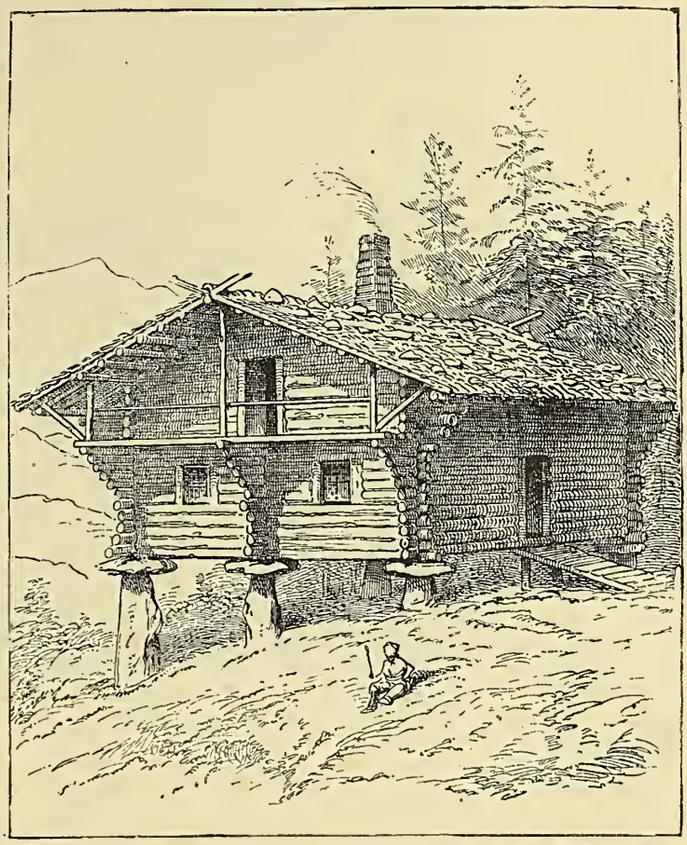
Bamboo, which grows in great quantities and of large size, like gigantic fishpoles, for the sides and floors as well as much of the framework.

The leaves of the palm for the thatch, and the rattan, a long and very tough vine of the palm family, very useful to tie the work together.

The Malay is naturally lazy. He had rather lie on his back in the shade and smoke his cigar, and study out the easiest way to build his house, than to run the risk of doing an unnecessary stroke of work. Moreover, his ancestors, for no one knows how long, have been building in the same way, so that he has only to look about him to find the problem well worked out.



Asking the assistance of a few friends whom he has helped on a similar occasion, he cuts a few trees of proper dimensions for the posts and timbers, and builds his hut. The roof is a foot thick and is an excellent protection against both sun and rain. The sides are basket work of split bamboo, and the floor of bamboo slats, covered with mats. This hut satisfies the requirements to the fullest extent. The air circulates through it in every direction, rendering it as cool as a hut can well be. Mats hung over the door and windows secure the necessary privacy and darken the interior to the exclusion of flies and mosquitos. House-cleaning is made easy. The floor mats are turned over from time to time, and the use on the opposite side shakes



[*From Viollet le Duc.*]

the dirt down between the slats of the floor. The whole has been produced for the least possible labor.

The Aryans under similar circumstances build of logs and thatch. Many ancient dwellings were built in the still waters of sheltered and shallow parts of lakes, known as Lacustrine. These belong to no special race; they are found in Switzerland and other parts of Europe, and in in Asia. They were built by the yellow race, the Chinese and Turanians, and at times by the Aryans, to make their isolation in the water a protection from man and beast.

When built by the yellow race they are much like the Malay hut of bamboo and mats, when by the Aryans they were of logs. To quote Viollet le Duc, "Whether it was the result of natural predisposition or of the environment by which the various races of mankind were surrounded at the outset, it happened that these races adopted certain methods of construction, methods whose original elements are handed down from age to age, and make their appearance at the present day as manifestly as do the roots of each of the languages spoken by those primitive races."

Thus far we have treated architecture in its earliest beginnings from its starting points, directed and governed by, and originating out of, the simple requirements of protection from the elements and for privacy. Architecture as a fine art had not yet existed at these epochs and in these localities. Art is due to other causes.

"It is evident," says Viollet le Duc, "that at certain times art has been developed with singular energy, has been honored, cultivated and beloved, while at others it has fallen into indifference, neglect, or even contempt." It is customary to divide the history of art, accordingly, into periods of glory and periods of barbarism. But what is barbarism?

A people may be barbarous, according to our modern point of view, that is savage, superstitious, fanatical, without order or system in any of its movements, governed by the most imperfect laws, and yet possess very perfect arts,

and on the other hand a nation may be civilized and polished to the very highest degree, organized under the most refined philosophy, and adorned by the most polite manners, and yet in its arts be degraded or even barbarous.

Barbarism, in the sense of *cruelty*, can have no influence on the arts, for history shows but too many examples of the prevalence of this unhappy instinct of human nature among people who have brought the arts to the very highest degree of development.

Thus while the Greeks were building the Parthenon at Athens, they were plunged in all the cruelties of the Peloponnesian war; while the Romans were spreading their civilization over the known world and enriching their most distant possessions with monuments of admirable skill, they amused themselves with mortal combats between slaves who had no cause for mutual hatred, and systematically gratified the savage curiosity of an idle populace by casting human beings to be devoured by the wild beasts of the circus. And in later times while Christians were covering the East and West with the most inimitable works of art, they were slaughtering and burning one another at the stake for mere difference of opinion on a dogma, or on the interpretation of a text. Evidently we have no use for the word *barbarism* in this sense. It is used in the arts only in its broader sense of *uncivilized*.

In comparing the arts of different periods it is not a question of degree of civilization, but of condition more or less favorable to the development of art. Institutions, politics, science, letters and the arts do not develop together. In science we excel all that has gone before. We have steam derricks, and stone planers with a dozen knives cutting at the same time; steam rubbing beds, and saws with diamond teeth that cut stone almost as fast as the tools of the ancients would cut old cheese, and yet the Parthenon at Athens is still the architectural gem of the world. We have schools of anatomy much in advance of anything in Greece, and yet we have no sculptor like Phidias. The chemists make many pigments unknown to Titian, and put them in a shape to facilitate to the fullest extent the painter's work. And yet, we have no one that paints like Titian or Paul Veronnese.

We have railroads, telegraphs, telephones, electric lights, and much else that the ancients would have thought knowledge reserved only for the gods, and yet we have no Homer, nor have we advanced beyond classic times in many branches of literature. What conditions are favorable to the arts we will endeavor to learn. This is one of our lessons.

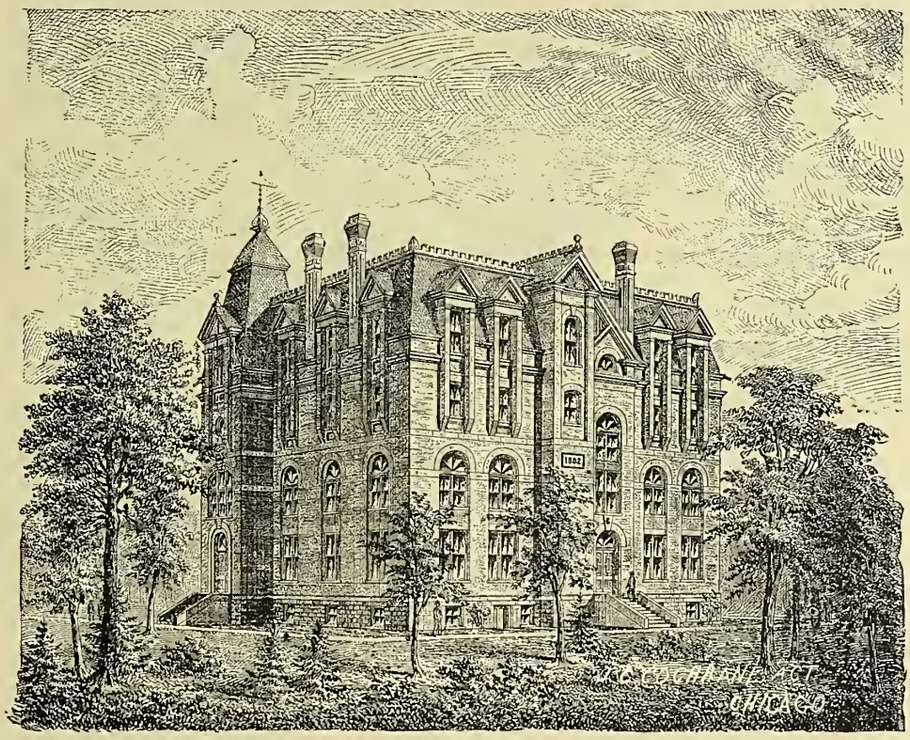
History of Chicago Architecture.

PART III.—OUR GRAIN ELEVATORS.

RECOLLECTIONS OF JOHN M. VAN OSDEL.

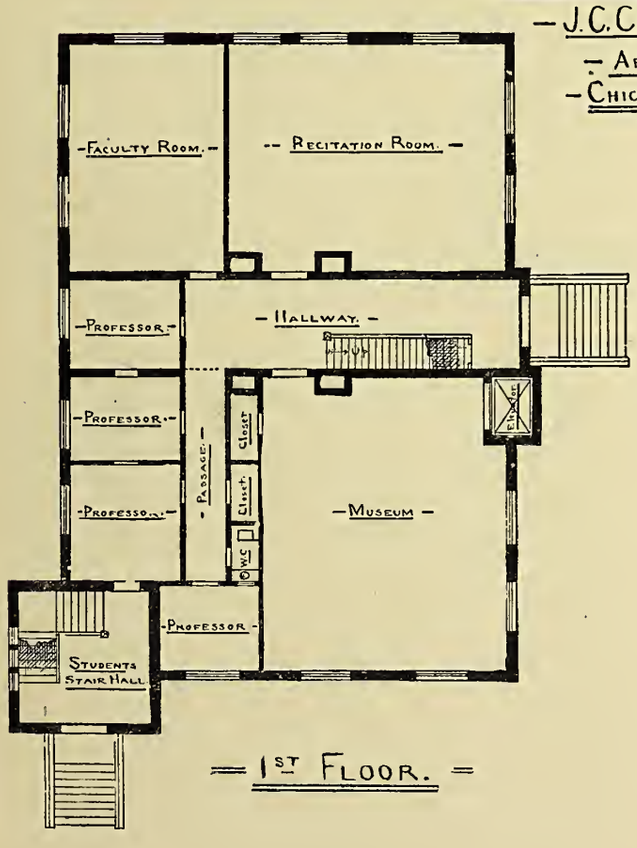
THE great number of these gigantic structnres indicate the vastness of the grain trade of our city. Strangers may be astonished at the extravagance of our business palaces and the costly and beautiful homes of our business men, but are amazed at the necessity of so many huge buildings to accommodate a single branch of the business of Chicago. The extent of this branch places us in the front rank of the grain markets of the world. It may be of interest to note its inception, rise and progress, and the necessity of suitable accommodations for its reception, storage and shipment. There were no buildings constructed purposely for the storage of grain prior to 1848, but several of the frame warehouses located on either side of the river, east of the branches, were used for storage of grain in limited quantities. In 1842 and 1843, machinery was introduced into six or seven of these storehouses for elevating and distributing the grain into bins arranged in the upper lofts of the buildings; one horse walking on an endless revolving platform was sufficient to run the machinery in these primitive elevators. The grain was received from farm wagons driven close to the front of the building, where the bags were emptied into a receiving hopper, from which the grain passed into the weighing hopper inside of the building. After being weighed, a valve was drawn in the bottom of the hopper, and the grain passed down to the elevator buckets. It was necessary to form a pit several feet below the surface of the ground, to allow the grain to descend to the elevator. These pits were formed of circular water-tight tubs, 8 or 9 feet diameter and 7 or 8 feet deep, as the surface of the ground was not more than 2 feet above the surface of the river. Farmers brought their grain to Chicago in wagons containing from thirty-five to forty bushels a distance of 100 miles, and returning home with a load of salt and lumber. Much of the grain was from the northeastern part of Indiana. The wagons, generally covered with a white cloth, were called prairie schooners. The roads leading out across the level prairies surrounding Chicago, were almost impracticable for loaded wagons in wet seasons. The first railroad leading out from Chicago, "the Galena," now the "Northwestern," had, in 1848, been completed for six or seven miles to the "sand ridge," now known as "Austin." Mr. William B. Ogden, the president of the road, invited a number of gentlemen to make an excursion to the sand ridge on the new road. Among the guests were B. W. Raymond, John B. Turner, Joel C. Walter, Stephen F. Gale, Geo. W. Dole, Julian S. Rumsey and others. On their return trip they discovered three wagons loaded with grain hub-deep in the soft prairie, and apparently fixed for the season. Mr. Ogden suggested that they assist the farmers by loading the bags of grain on their car, which was done, the guests assisting in the performance. This was the first car-load of grain brought to Chicago. In 1843, Messrs. Newberry & Dole erected a large warehouse on the northwest corner of Clark and South Water streets, having one of the endless platform horse-power, which made considerable noise when in motion. Mr. Julian S. Rumsey suggested to Mr. Dole that the horse be hoisted into the attic of the building, and perform his labor on a circular track drawing upon a sweep or lever. This was accomplished, and persons were often amused at seeing a horse's head thrust far out of a small opening in the Clark street gable of the building, where the animal seemed to enjoy the fresh air and birdseye view of the city. In 1848, George Steele built a frame elevator on the northwest corner of Wells and South Water streets; the machinery moved by steam. In 1849, E. H. Haddock and M. O. Walker built a frame elevator on the southwest corner of River and Dock streets; and, in 1850, Messrs. Horace Norton and Joel C. Walter erected a building, 40 × 80 feet, three stories high, on the northeast corner of Dock and River streets, the walls of stone work, for the purposes of an elevator. Slips were cut in the basement of these two last-mentioned buildings, to admit canal boats from the river. Then followed in rapid succession elevators of increased capacity by Flint & Wheeler, Munger & Armour, Gibbs, Griffin & Co., all frame buildings; then the Galena elevator, a brick building; also the Illinois Central elevators in 1855 or 1856, of brick, the interior of all of heavy framework. In 1857, the Northwestern elevator at Indiana street, on the north branch of the river, was built in a novel manner; the entire walls of the building and the partitions forming the bins were formed of 2 × 6 scantling laid in horizontal courses flatwise and firmly nailed down, one course upon another, until the desired height was obtained. This system of elevator building was invented by Alexander Miller, a very skillful mechanic, who had been engaged since 1843 in constructing and arranging the machinery of our elevators. Every elevator in the city built since 1857 is on Miller's plan of construction. In 1855, the Great Western Railway company, of Canada, advertised a premium for the best plan of an elevator, to be built for them at Hamilton, C. W. There were twenty-nine plans submitted, of which four were from Chicago. After a careful examination, Mr. Miller's plan was unanimously awarded the premium. Mr. Miller has superintended the construction of eighteen of our largest elevators. The warehouses of 1842 would receive about 300 bushels per hour, and ship by hand, in boxes, about 1,000 bushels per hour. At the present time one elevator can receive 28,000 bushels per hour, and can ship 50,000 bushels in the same time. The largest elevators can store one and three-quarter million bushels of grain.

The stock of pine lumber and shingles in the Chicago market, compared with that of 1882, shows an increase in the lumber supply of 6,487,405 feet, and a decrease in shingles of 13,956,661.

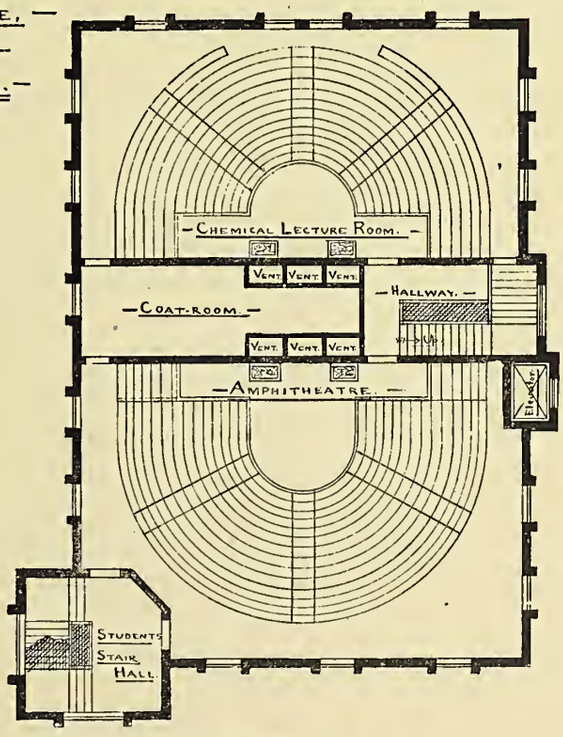


— Medical College, State University of Iowa. —
— at Iowa City. —

— J.C. Cochrane, —
— Architect. —
— Chicago. Ill. —



= 1st Floor. =



= 2nd. Floor. =

Decoration in America.

LOUIS J. MILLET.

PAPER III.

DESIGN and color, those two factors of decorative result, are so closely allied that the rules of one define the functions of the other. The process of the mind in composing a polychromatic ornament is but one. We conceive of its coloration and its form at the same instant, and the probability is that having appeared in our imagination simultaneously both color and design are harmonious as being necessary part of a same conception. But our mode of transmitting our composition is not only slow, but is such that two operations have to practically be gone through. First the careful study of form and outline, then the coloring of the different parts; and often in the developing of these two elements, the composition loses its original distinctness, we partly forget the link that joined them in our mind, and the harmony between the form and color is reached only after a visible effort. This is certainly the great difficulty in good designing, for no pleasing effect can ever be obtained if a struggle for supremacy is visible between the form and color of a decoration, even though the colors may be in harmony with one another, and the design itself be of correct taste. The effect will always be an unsettled one. In Pompeian, Moorish and Gothic art the study of these principles had reached such a comparative perfection that certain laws might have been framed from them which will remain true in every period. Thus, if we examine Gothic interiors, we notice that in the surfaces, which because of their dimensions or position give, when colored, the general tone of the interior, shades of similar colors were used, and effect by analogy was preferred to contrast. While in the smaller portions that were made noticeable either by their architectural importance, such as columns, capitals and architraves, or by their richness of relief, such as carved panels or borders, complementary colors were used, producing effect by contrast and opposition, and the richness of these portions of the edifice were made all the greater by the plainness and repose of the surrounding surfaces.

In Pompeian art we notice that the line of ornamentation in an apartment extended along the upper part of the walls, while the lower part, or dado, as we call it, was almost invariably plain and as unobtrusive as possible, just as if the artist had tried to make the apartment look as if it only was to be seen above the line of dado. The reason of this was partly a practical one and partly a theoretical one. Such decoration below a certain line would probably have been rapidly destroyed by its proximity to articles of furniture, etc., and the theoretical reason, based on the laws of perspective was and is still that to appreciate the general effect of a room, in fact to see it in such a way that the eye takes in the greater surface, we have to look at a point above our height, and it is to induce the spectator to do this, that the decorator called the attention to the upper part of the walls by means of placing there a line of richness which we call a frieze. In that way the general decoration and proportions of a room were noticed.

As far as warmth of color is concerned, we see that in southern countries strong and warm tones were used because color had to be tuned to a higher pitch in order to be effective under the glow of the southern skies. The decorations, carpets, and other manufactures of Eastern people, show their appreciation of this. Even the Moors, finding in Spain a climate resembling somewhat their own, built the Alhambra, that marvel of color.

But the Gothic artists, who were studying an art adapted to a colder climate, where the rays of the sun were less intense, made use of cooler and softer tints, excepting, however, when the powerful colors of stained glass were introduced, giving to the churches the same glow as the sun to the Alhambra. Then the mediæval artists understood that a higher diapason of color could be introduced and then, and not until then, were seen the gorgeous colors of mediæval frescoes.

The Use of Stained Glass.

THE nearer we harmonize with nature the nearer do we come to securing beautiful effects in color. The effect of a blue sky is heightened by a green hillside or a flower-covered plain. So in the art world, which copies nature, and in the combinations of stained glass. It is centuries since stained glass was first made in Venice and in England, and until a very recent date there was as little improvement in its general manipulation as in the making of violins, or of birch canoes. While this is true in a general sense, the stained-glass artists of today are much more talented, and while the same serrated strips of lead are used to join the fragments that go to make the window, the selection of these fragments is more harmonious. Then, too, a greater variety of kinds of glass is made. With the Antique and Cathedral we have also the Venetian, and better than all the rest for the production of fine artistic effects, we have the rough and opalescent glass, made in New York. With this latter glass no painting is used, but the effect is produced purely by the selection of the colors and their harmonious arrangement, the lead lines often being used to help out the design.

The use of stained glass, for so many centuries confined to the decoration of churches and palaces has become so universal, that scarcely a house of any architectual pretentions can be found that has not stained glass in door or window, and even to fire-screens its use is applied, and here, as everywhere that the effect of light is available, its beauty is enhanced.

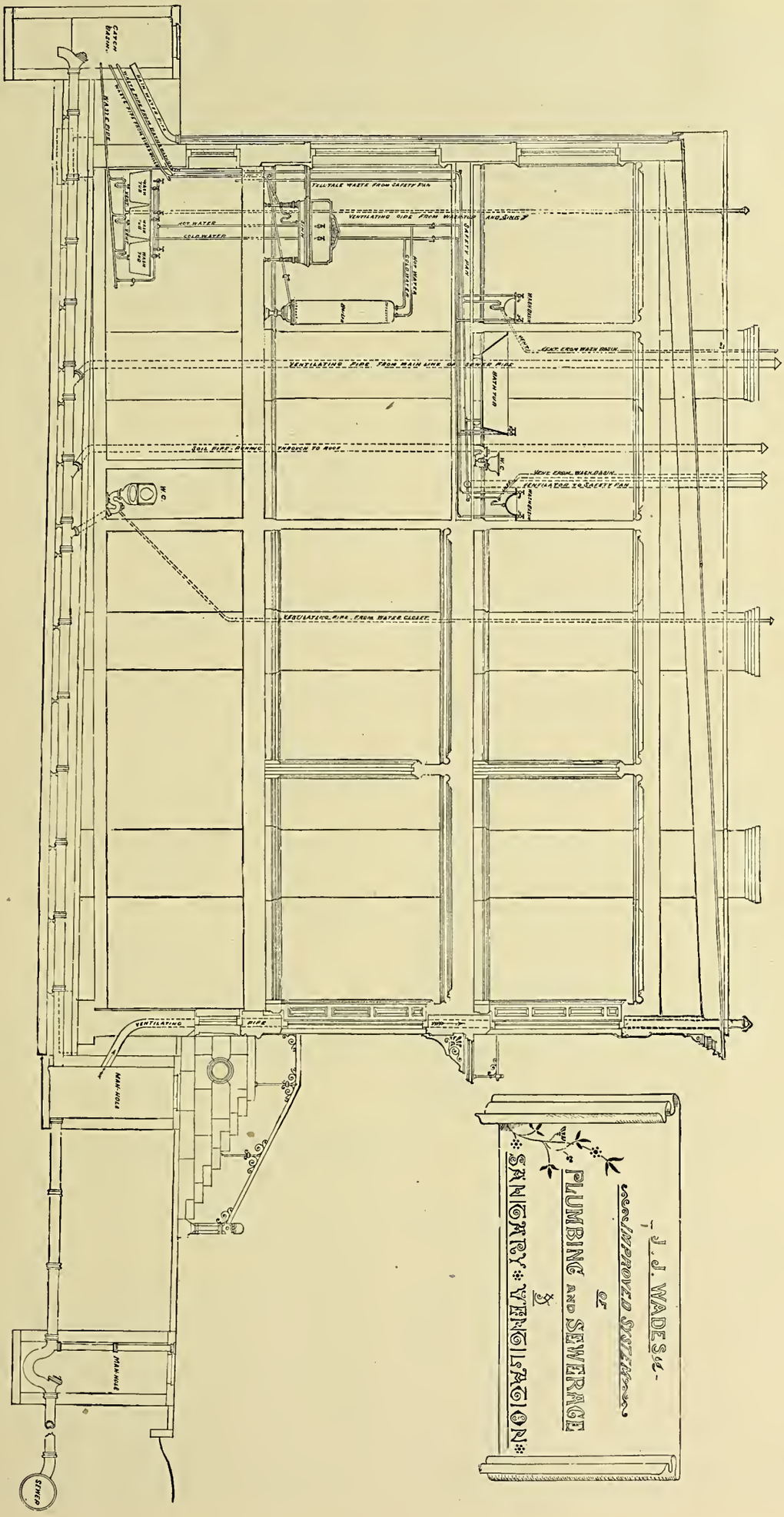
A beautiful sample of glasswork comes from the East, where a large amount of capital has been collected for its manufacture. It is a revival of Egyptian or Persian art, and so many are the varieties of color and effect to be produced, it is beyond all description. One sample is a glass fish, with all the silver scales delicately defined; another is a combination of rainbow colors, and with it, as a prominent scientist expressed it, a room could be set with this material and sparkle and glow as though set with all the precious stones and metals the world can produce. All these different descriptions of glass display the purity of color with the sparkle of the diamond, and give ample scope to the taste and skill of the artist.

And why can this not be but the beginning of an epoch that will bring to the world some of the magnificence that, though to our cultivated minds seems to have been barbaric, still was magnificent, that tradition and only tradition tells us of? It certainly promises well, for already the stained-glass artists are beginning to produce more ambitious subjects. In a recently completed club house landscapes, marine views and moonlight scenes were produced with natural glass, and with wonderful fidelity to the effect of color, and a leading firm of artists have in contemplation the illustration of a popular poem upon the windows of a projected mansion. Beautiful designs in floral work, are also one of the signs of an improved and æsthetic tone in stained-glass manufacture, and the West has in her Chicago stained-glass artists one of the factors that will in the near future give to her homes much beauty, and win for her much well-deserved renown.

Improvements in House Drainage.

THE system of plumbing, sewerage and sanitary ventilation planned by J. J. Wade, and shown by our illustration, is to be commended for simplicity and thoroughness, every point of danger being apparently guarded. By this system, instead of an earthen drain-pipe a castiron pipe dipped in asphalt or tar with its joints firmly calked with lead, is placed on small iron standards within an arch of masonry running under the house. A running non-siphon trap is placed on the pipe at the curb wall within a manhole, and is provided with a 4-inch ventilating pipe carried to the surface. The drain-pipe is thoroughly ventilated by pipes carried through the roof, running, where possible, through chimneys. The catch-basin is carried to the surface, and is also ventilated by a pipe running through the roof. To relieve stoppages all pipes are provided with manholes, and are readily accessible. Under the bathroom is a properly constructed safety pan with wastepipe. All tubs, sinks, bowls and closets are thoroughly trapped and ventilated, and are set without surrounding woodwork, thus being always open to inspection.

The system is the embodiment of improvements suggested by twenty-five years of practical, intelligent service in sanitary work, and where it has been used it has given excellent satisfaction.



J. J. WADE'S
Improved System of
PLUMBING AND SEWERAGE
&
SANITARY VENTILATION.

Furniture.

In the days of our great-grandfathers, the primitive days we call them now, when the wheels of time revolved more slowly and deliberately, the days before the world had caught the velocity and uncompromising headlong rush with which all things seemed to be affected upon the invention or application of steam power, the furniture was of a different mould and quality than that of the present day. Instead of the heavy bedstead built into the wall when the house was new and made to last for generation after generation to come into the world upon, and upon which again to pass out of the world, unmoved and unmovable as the stone walls of the house itself, we have the lighter furniture of the present day. Indeed, in this country especially, where the "world moves," each year as the almanac heralds the first of May the fashion has all gone to light and graceful house furniture. The taste of the present day is illustrated by the display in our great furniture establishments, and through the courtesy of Mr. Frank Tobey, of the Tobey Furniture Company, one of the most enterprising dealers in the West, the writer was permitted to examine all the latest fashions in household goods, and to compare them with what our fathers thought to be sufficient for their needs in their day. Here is a chamber set, made of solid walnut and veneered with the most beautiful of walnut burl. Eleven hundred dollars is the price, and fit for the palace of royalty, or, what perhaps is more to the point, of a "bonanza king."

Walnut, first used as a substitute for mahogany, then because of its beauty and strength, became more generally introduced. At the present day so much is being used and exported that the wood is becoming more scarce year by year. Fortunately for the growing trees the fashion is again changing and reverting to "old mahogany." Sideboards of every design imaginable are manufactured, mahogany is the favorite wood, some richly carved and of elaborate design, with back pieces of plate mirror glass, and others as elaborate but of more stability and heavier mould. The forests of Yucatan and Central America are full of this beautiful wood and the new railroads which are opening up Mexico to commerce will certainly bring this and other beautiful and now costly woods to our markets at prices within the reach of all. Though the bedstead or the sideboard is not of the heavy, clumsy pattern of "ye ancient day," still the tendency is to copy the antique, and the surface of the mahogany is stained to give it an old look. Yes, everything is antique, or copies the antique, and about the only thing modern is yonder folding-bed that looks like an elaborate dressing-case or secretary with a mirror in its imitation doors. True, our grandfathers never slept in folding-beds, but they are handsome and convenient beyond a doubt. These mirrors with frames of Venetian glass cut and sparkling surely are artistic and beautiful, and these beautiful furniture wonders are not heavy, but are like the times, built to please the present fancy and the present fortune, too, of the purchaser, yet all bear some shadow of the ancient and antique, excepting those chairs with polished horns for backs, and they are as modern as the Texas cowboy and as inimitable.

Manufacturers are vying with each other in the production of beautiful shapes, and the West with her supply of material is not lacking in men of enterprise and genius, who keep even pace with the demand of the times, and with artistic talent and mechanical skill shape the furniture that make our homes the center of the world, the haven of rest, and the place of comfort.

Art Notes.

The old but ever new subject, "Niagara Falls," is to be painted by two of Chicago's most promising artists, Messrs. Green and Bromley, who started last week to Niagara to collect studies of that great "badger blender."

Mr. Gay is doing a good work here, and that the work is appreciated is evidenced by the recent sale of his marine view, "On the Coast of Maine," to a New York lady. Mr. Gay's "Morning by the Sea" is of equal merit, and shows talent for marine conceptions and a fidelity to the most subtle effects of marine color.

Stevens' Art Gallery exhibits a collection of monotypes, copies of pictures from the great Russian gallery, "The Hermitage," at St. Petersburg. Until last year these paintings were not allowed to be copied, and as these are the first of the collection ever exhibited in America, it is of peculiar interest to lovers of art in Chicago. Mr. Stevens' new gallery possesses the finest facilities for the advantageous display of art works of any gallery in the west. The exhibition of Chicago artists' work is a decided success, and creditable to Mr. Stevens and the artists represented.

The first reception of the Art Guild given in their new hall in the Weber building took place on the evening of the 11th instant. Quite an elaborate musical programme was enjoyed by the audience, after which dancing was indulged in. Among the artists whose works were exhibited in the Guild rooms, Mr. Earle, Mr. Bromley and Mr. Green were the more prominent. The invitations were, as usual, decidedly unique. They were etched by Mr. Earle and printed on fine cards.

Messrs. Rosenberg & Field have gone to New York, where they will arrange to spend the summer among the pastoral scenes in Brittany. Prof. Henry Spread will start in June for Europe, to gather material for a somewhat ambitious picture already commenced. People in general do not half appreciate the fact that the artists who leave the city every summer and scatter over the face of the earth into out-of-the-way corners, and live like nomads, do it for the love of their art, the production of the natural and beautiful, and confer an unrecompensed benefit upon those who look at the finished picture and judge it by its commercial value, and forget the genius and hard work that gathered the elements from nature and produced it.

Special Correspondence.

ST. PAUL AND MINNEAPOLIS.

St. Paul, Minn., May 20, 1883.

Editor Inland Architect and Builder:

Although there is no "boom" to be recorded in regard to the building situation, the activity in some localities, especially that in the neighborhood of Summit and University avenues, indicates that building is by no means at a standstill, and the improvements under way indicate one of the most active of building seasons ever known in St. Paul.

The tendency is for syndicates to form for the purpose of purchasing tracts of ground, dividing them into building sites.

Baker & Stone have done much to solve the problem of cheap homes in St. Paul. One tract they have purchased and laid out in lots 40 by 129 feet, is called Oakville Park addition; also one hundred acres on Fort street, has been purchased by them and laid out in the same manner, and farther negotiations are in progress. Messrs. Grove, Oppenheim & Co., are also selling their lots rapidly.

Among the builders, Adam Golzian is about to construct twelve houses on Dayton's bluff, and has arranged for the construction of thirty more, to be sold on monthly payments to laboring men.

The new opera house is fast becoming a reality, the walls being built as rapidly as the work can be pushed.

The foundations for several residences have been begun on Summit avenue.

Three stores of Herzog's stone building, on Fourth and St. Peter streets, are up.

A $5,000 residence is about to be built for Mr. A. C. Fuller.

The second story has been reached on Commodore Davidson's brick; also on that of J. H. Davidson, adjoining.

The strike of the plasterers on the 14th, will probably cause some inconvenience, but plenty good non-union men are to be had, and a thorough stoppage of work is not anticipated.

Mr. Washburn's house is being rapidly finished.

MINNEAPOLIS.

At a recent meeting held to secure subscriptions for stock and make arrangements for the establishment of a market at South Minneapolis, one hundred and twenty-seven shares were subscribed. The capital stock is $50,000, at $50 a share. The plan submitted Architect Haley is extremely creditable, and the interior arrangement sensible and convenient. The dimensions are 226 by 75 feet. The building will be heated by steam and lighted by electricity.

The excavations for Coultan's block to be built, Nicollet and Ninth streets, are made, and this mammoth enterprise is destined to be a monument to its projector, and an honor to Minneapolis.

The new union depot will cover the site of the first house ever built in Minneapolis.

The work on the new West hotel is progressing. This hotel, of which L. S. Buffington is the architect, is to be one of the finest in the country, and will cost $1,000,000. It is to be finished in stone and pressed brick, and will be fire-proofed throughout by the Ottawa Tile Company, of Chicago.

The laying of stone sidewalks in the business portion of the city is progressing, and soon will place these streets in fine condition.

St. Paul.

DES MOINES.

Des Moines, Iowa, May 14, 1883.

Editor Inland Architect and Builder:

The building boom continues unabated. While but few large and costly buildings have been projected during the past month, the number of moderate cost structures, principally dwellings, in course of construction, mostly without the aid of an architect's service, is unprecedented. A reporter of the *Daily Press* claims to have counted over three hundred new buildings in progress of construction, all in plain view from the roof of the west wing of the Capitol building.

Most of the buildings heretofore mentioned in this correspondence have made good progress during the month, but our local manufactories are unable to supply brick in sufficient quantities, although the weather has been very unfavorable, both for brick making and laying.

Sanford E. Loring, of terra-cotta fame, and without doubt the best expert judge of clays, and of all matters relating to the manipulations of clays for building material, pronounces the clays found in the vicinity of Des Moines of the finest quality and the best adapted to the finer grades of pressed brick and terra-cotta, of any to be found in America, and yet we are importing all our pressed brick from Philadelphia and St. Louis. While I do not want to use your columns for free advertising, if this should meet the eye of an experienced and skilled pressed brick manufacturer with capital and pluck, I would advise him to investigate Des Moines clays with reference to the manufacture of pressed and the finer grades of brick.

The terra-cotta manufactured by True, Brunkhorst & Co., of Chicago, for the new opera house, the Des Moines National Bank building and Clapp's block is now being placed in position, and is much admired by our citizens.

Iowa has no good building stone suitable for dressing, our principal supply coming from the Ohio quarries, and with such a superabundant supply of good clay so well adapted for terra-cotta and pressed brick, it is like carrying coals to Newcastle, to import stone from Ohio and brick from Philadelphia.

Among the new buildings recently projected is a four-story business block adjoining the new Des Moines Bank building, to be of the same style of architecture, and owned by ex-mayor George Sneer, Esq., Bell & Hackney, architects; a block of eight stores on East Locust and Sixth streets, four stories in height, owned by Messrs. Garver, Miller, Christy and others. I have been unable to learn the architect's name.

Bartlett & Son are at work on the plans of Lake Presbyterian church, Chicago, to be of pressed brick trimmed with terra cotta, to cost $20,000.

De Moin.

DETROIT.

Detroit, Mich., May 18, 1883.

Editor of the Inland Architect and Builder:

The building boom has not abated since my last letter. The architects say that a greater demand for immediate construction was never known in the history of Detroit building. The demand seems to be for the better class of residences, and a large number are of brick.

The number of contracts let were considerable less than last month, presumably because the architects and builders already have all they can well attend to. The following is a list of the more important permits issued up to date:

BUILDING PERMITS.

Jas. Anderson, brick dwelling, 23 Spruce street	$ 4,900
A. Beaton, three frame dwellings, Fourth avenue	3,000
Nuppenan & Clark, brick schoolhouse, corner Cass avenue and Stimson street; G. W. Lloyd, architect	30,000
A. Beaton, frame dwelling, 585 Third street	3,500
H. George & Son, frame dwelling, 17 Prentis avenue	3,000
G. W. Buffum & Co., two brick dwellings, Charlotte avenue, Nos. 181 and 183	6,000
M. W. Scoville, two frame dwellings, Fourth avenue	4,000
Julius Hess, brick dwelling, 46 Canfield avenue	8,000
Richard Nelson, brick shop, Plum street	4,000
A. C. Varney, brick dwelling, Second street	5,000
Julius Hess, additions to brick brewery, Grand River avenue	10,000
Robert Bird, three frame dwellings, Seventh street	10,500
J. F. Weber, frame dwellings, Sixth street	12,000
H. L. Beaubine, frame house, 409 Fourteenth street	4,000
Mason & Rice, brick house, 20 Peterboro street	12,000
H. George & Son, frame house, 159 Willis avenue	4,000
J. & H. Wagner, two brick houses, 32 and 34 Joy street	8,000
W. H. Holland, five brick houses, Sproat street	19,000
Alex. Chapoton, four brick stores, 384 to 390 Gratiot avenue	5,700
Mason & Rice, brick factory, First street	7,000
Mason & Rice, brick dwelling, 1008 Woodward avenue	12.000
W. H. & C. F. Gibson, two frame houses, 838 and 860 Cass avenue	6,000
Robert Robertson, brick house, 8 Howard street	5,000
Albert Albrecht, brick storehouse, 56 Croghan street	12,000
Nuppenan & Clark, brick warehouse, Atwater street	5,000
Donaldson & Meier, brick store and dwelling, 421 Clinton street	8,600
Joseph Schrager, brick store and dwelling, 501 Gratiot street	3,000
N. J. Rogers, frame dwelling, 363 St. Aubine avenue	4,000
W. G. Vinton & Co., brick house, 34 Peterboro street	9,000
A. Chapoton, brick house, Peterboro street	10,000
A. C. Varney, brick warehouse, 96-100 West Congress street	23,000
A. C. Varney, four-story brick wireworks, 214 West Congress street	14,000
A. C. Varney, brick house and barn, East Montcalm street	8,000
A. C. Varney, brick house, 17 Peterboro street	6,000
A. C. Varney, double brick house, Cass avenue	10,000
A. C. Varney, two brick houses, 21 and 23 Bagg street	17,000
A. C. Varney, frame house, Cass avenue	5,000
A. C. Varney, brick house, 505 Cass avenue	7,000
J. A. De Gaw, two brick stores, Michigan avenue	6,000
Julius Hess, brick house, 555 Second street	6,800
Julius Hess, brick house, 557 Second street	12,000
Julius Hess, addition to brewery, Grand River avenue	6,000
Julius Hess, addition to church, Campen avenue	4,900
H. W. Holcomb, frame dwelling, Fourth Avenue	4,000
G. W. Vinton & Co., brick house, 96 Joy street	5,000

Builder.

CINCINNATI.

Cincinnati, May 20, 1883.

Editor of the Inland Architect and Builder:

There is little change to report in the building aspect of Cincinnati. The following list of the more important building permits will serve as an indication of the way the spring work among builders is increasing:

BUILDING PERMITS.

Miss Belle McIntyre, two-story frame dwelling, Park avenue, near Vine street	$ 5,000
August Miller, three-story brick dwelling, State avenue, near Gest street.	9,000
A. McKaid, three-story brick dwelling, Third avenue, between James and Rachael streets	4,000
John Hater, three-story brick building, Betts street, between Central avenue and John street	6,000
Wm. Buck, four story stone front building, southwest corner McLean and Harrison avenues	12,500
Mark Levi, alteration to four-story brick store, southeast corner Pearl and Walnut streets; Chas. Crapsey, architect	7,000
J. H. Empson, ten two-story brick dwellings, Linn street, near Wade street; Wm. Wicker, builder	15,000
Mosler & Co., four-story brick factory, northeast corner Bank and Denman streets	11,000
D. Fix, three-story brick building, Harrison avenue	3,000
A. C. Richards, three-story brick dwelling, Kemper lane, near Windsor street	11,000
Geo. Stribley, four-story brick building, Fourth street, between Main and Sycamore streets	3,000
Strobridge & Co., five-story brick printing-house, on Canal street, near Race street; Samuel Hannaford, architect	40,000
J. J. Abbihl, two-story brick building, southwest corner Vine and St. Clair streets	3,000
Henry Jenny, two-story brick building, Vine street, between St. Clair and Wayne streets	3,000
A. Lowhouse, three-story brick building, Poplar street, near Dalton avenue	4,000
Clement Oskamp, four-story stone front store, Central avenue, between Eighth and Ninth streets; Henry Bevis, architect	15,000
A. Brust, three-story brick building, Oak street, near Buckeye street	3,500
Mrs. Bice, three-story brick dwelling, David street, near Central avenue.	4,000
Mrs. B. Hart, two-story frame dwelling, Hawthorne avenue, near Warsaw Pike	4,500
H. Herning, two-story brick building, Calhoun street	4,000
A. Smith, two-story brick building, Wheeler street	3,000
Miss Kate Riley, three-story dwelling, No. 129 Longworth street	5,000
Twenty-six permits for repairs	26,000
Total permits to date, 270.	
Total cost to date	1,056,100
Jas. L. Haven, three-story brick building, north side Commerce street between Elm and Plum streets	3,400
Jas. Blackard, two-story brick building, east side Gilbert avenue, between Locust and Kemper streets	3,000
Ed. Bice, two-story brick building, nortbeast corner June and Reading streets	2,000
Miss Ella Piatt, two-story brick building, York street	3,500
John C. Thoms, repair two-story brick building, west side Central avenue, between Fourth and Fifth, known as Thoms' Hall	15,000
E. Gurney, three-story frame building, Browne street	4,500
John J. Pfeffer, three-story brick building, corner Harriet and Gest sts	7,000
D. H. Baldwin & Co., four-story brick store, Fifth street, between Wood and Stone streets	7,000
C. H. Weiss, two-story brick building, 660 Sycamore street	3,500
Wm. Onitges, four-story brick building, 512 Race street	7,000
Peter Scherer, three-story brick building, southwest corner Liberty street and Central avenue	10,000
Mrs. F. Darusmont, four-story brick building, 917 Vine street	10,000
A. J. Mullane, two-story brick building, corner Central avenue and Third street	4,000
George Schutter, three-story brick dwelling, corner Fourteenth and Race streets	3,000
James Mack, two-story frame dwelling, 588 Eastern avenue	7,000
J. H. Weston, five-story brick store, 27 West Sixth street; A. C. Nash, architect	14,000
J. C. Thoms, two-story brick theater, Central avenue, near Fifth street; Henry Bevis, architect	15,000
Zion Congregation, two-story brick building, Breman street	3,800
John Kahley, two three-story brick buildings, Central avenue, near Clark street	13,000
Henry Hussman, two-story brick building, 742 Front street	3,300
Mrs. Sara Gibner, three-story brick building, 198 Plum street	3,000
Mrs. Jane Coates, two-story frame dwelling, Denman street	.....
Blocker, Sachs and Gretels, five-story brick factory, corner Seventh and Sycamore streets	12,000
B. H. Hathaway, two-story frame dwelling, Park avenue, near Warsaw Pike	2,900
Mrs. S. Gibner, addition to three-story brick building, 198 Plum street	2,500

Grand Haven millmen are setting a grand example by agreeing to close down on the afternoon of decoration day. This should be followed by similar action in other cities, until decoration day becomes a recognized natural holiday, on which to commemorate the glorious deeds of the noble men who went forth in their country's defense in her great hour of peril.

Architectural and Building Notes.

The average rate of wages paid in Chicago at this date for bricklayers, is $3.75; carpenters, $2.75 to $3; stone-cutters, $3 to $3.50; plasterers, $4.

On the 11th instant the boiler of Gueyer's shingle-mill, located at Napponee, Ind., exploded. The building was entirely wrecked, two men killed and four others fatally wounded.

One of the most serious of the casualties during the storm at Evanston was the demolishment of a partly finished house, which buried Jasper Adams in the ruins. He fortunately escaped with his life, but had a limb broken in two places, and was otherwise injured.

T. C. Goudie, contractor, is constructing for J. Frank two stores with three stories of flats above, at the corner of Indiana and Robey streets, at a cost of $8,000. Cass Chapman is the architect. Also four two-story flats for Dr. Buchan, at Chicago avenue and Robey street, costing $4,000. J. Wilson is the architect.

Evanston, one of Chicago's most flourishing suburbs, the seat of the Northwestern University and Theological School, met with an "evil wind" on the 9th. A tornado swept through the town totally wrecking two churches, unroofed another, and blew in the windows of a fourth, also throwing it out of plumb, rendered it unsafe, and blew down several houses in process of erection.

The Atchison, Topeka & Santa Fé railroad is about to build a new general office building at Topeka, Kan. Messrs. Burnham & Root are the architects, and have completed plans for the building, which will be 75 by 180 feet, four stories and basement high, and constructed of pressed brick and stone. The arrangement is very convenient, and the building will be substantial and well equipped.

The Mortimer, Tapper and Grannis building is up to the seventh story, and already presents a fine appearance. The structure is being thoroughly fire-proofed by the Ottawa Tile Company. This company are also furnishing all the hollow brick for the lining of the inside walls of the Board of Trade building. The Wisconsin State Capitol will also be fire-proofed by them, and the new court-house of Clinton county, at Franklin, Ind.

The new residence to be built on the corner of Cass and Ontario streets for Judge Lambert Tree, by Peabody & Stearns, architects, of Boston, will be 70 by 62 feet, two stories, basement and attic in height. The walls will be Romanesque in style constructed of Long Meadow brown stone, rock faced similar to that used in the walls of the Union Club. The building will be completed in 1884. Mr. Ion Lewis represents the architects in Chicago.

Among the daily chronicles of the building and real estate interests of Chicago, the department devoted to these lines by the *Inter Ocean* is prominent. Always alert for news, intelligent in its selections, minute and critical in its descriptions, the department has become valuable to all who endeavor to keep posted upon the current transactions in real estate and the growth of the city's building interests, a recognition that is earned by successful competition and faithful work.

A very ingenious, yet simple and practical device for opening and closing outside blinds, is called the Dudley Blind and Shutter Worker. It is connected with the hinge and acts by leverage, and a child can open or shut the blind without opening the window. Architects say it is a valuable invention, and as the cost is but a small degree greater than a common set of blind-hinges, its rapid introduction is assured. Matteson & Gardner are the Western managers, with offices at the Grand Pacific Hotel.

The Wight Fireproofing Company has been awarded the contract for the complete fireproofing of the new $500,000 building to be erected for the Mutual Life Insurance Company, of New York, on Nassau, Cedar and Liberty streets, covering the site of the old New York postoffice. The contract for fireproofing will amount to $104,250. This fireproofing company have also the contract to build and finish seventy-two fireproof columns in the first arcade of the United States pension office at Washington, of which Gen. M. C. Meigs is the architect.

The terrible losses by fire that made the history of the past winter a notable one has directed the attention of inventors toward the improvement of fire-escapes. For several years the Benner escape has been before the public, and the well-known practical connection of "Mat Benner" with the fire department of Chicago, as its chief, and under whose management the fire department reached the rank of first in promptness and efficiency in the country, has given him a knowledge of the subject second to none. The constant improvements in the different styles of escapes and standpipes made by Mr. Benner have in them the practical solution of the fire-escape problem.

A notable instance of the growth of our suburban towns and the increasing value of building sites, is evidenced by the proposed erection at Evanston of a block of fine houses by Mr. Holbrook, from plans by Burnham & Root. This is about the first instance where buildings have been erected in blocks in the suburbs about Chicago for residence purposes. The front elevation is unique in style, and the front is composed of pressed brick and slate. That these fine houses are said to be all rented before the foundations are completed, is a decided indication that such houses are soon to be introduced, and, while it deprives the country resident of a lawn about his premises, it affords the landlord a better rental for his ground than could be obtained from an old-style cottage and a hundred feet of green grass around it.

It is said by good authorities that $90,000,000 are destroyed by fire in the United States yearly. The greater proportion of this is caused of course by non-fireproof structures. That lath and plaster ceilings are one of the greatest aids to a spreading fire in a building is beyond question; but while the material is cheap it will always be used by those who build cheap and do not count the risk of fire. The Clinton Wire Cloth Company, of Clinton, Mass., have invented and placed on the market a wire lathing which serves all the purposes of a fireproof wall. It is composed of a network of wire which securely holds the plastering, so that its cracking and falling off is impossible. It is in such shape that it can be applied to any wall, and even roofs can be covered by it and made secure. The cost is an objection only in falsely economical minds. Far better to pay twice the price of a lath and plaster wall and save insurance, for with this new material a substantial wall is secured, and indemnity from its catching fire guaranteed.

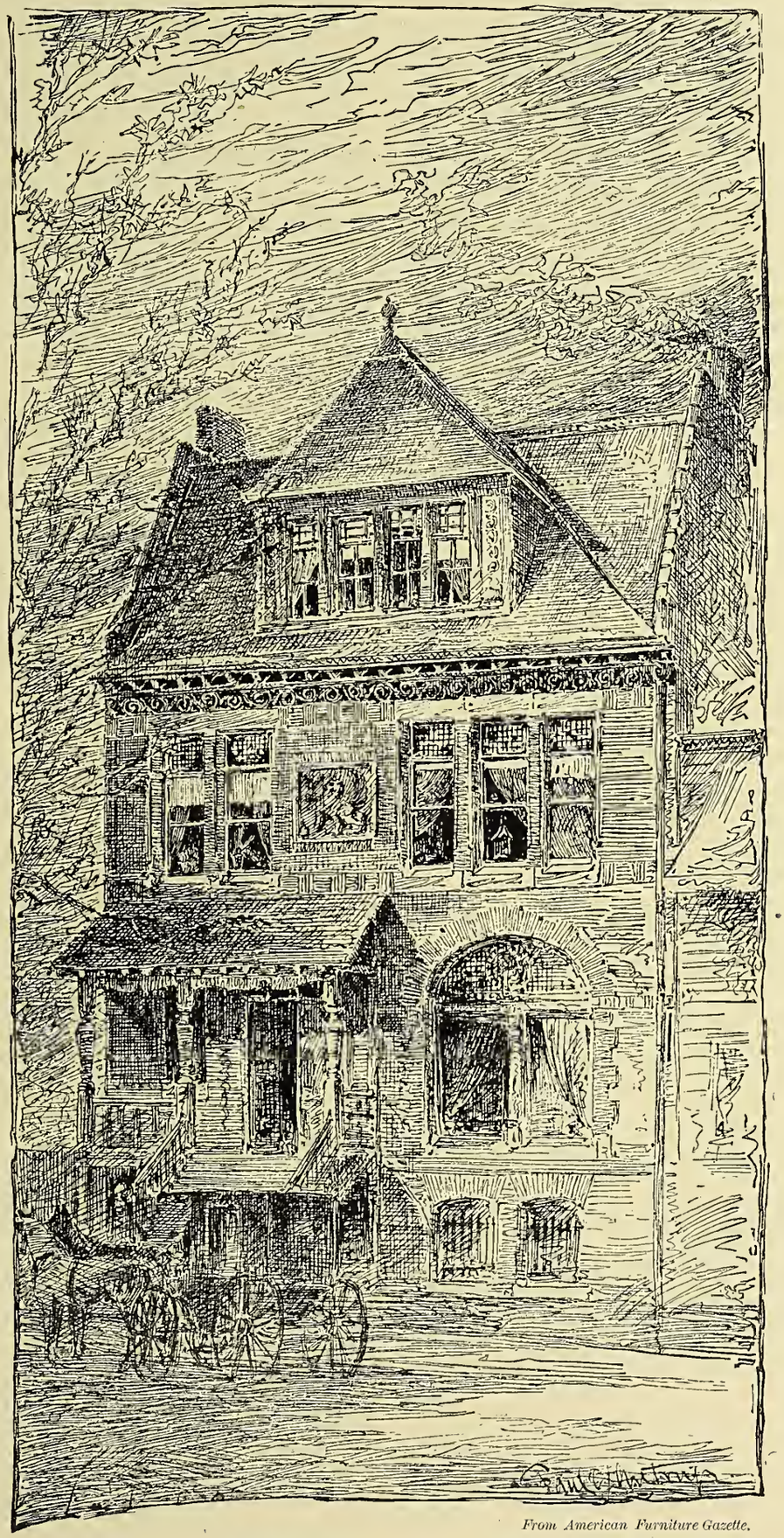
Personal Gossip.

Downing Vaux, the son of the prominent New York architect, Calvert Vaux, is suffering from the effects of gas poison, having some months ago narrowly escaped suffocation. The young man recently disappeared and was gone for several days before he was found aimlessly wandering in the country. The young gentleman is said to be affianced to the daughter of Edwin Booth, the actor, and his misfortune is doubly sad on this account. He is twenty-six years old, of exceptional good habits, and a gentleman of high moral worth and social standing, and has already secured some fame as an architect of ability and promise.

W. L. B. Jenney, one of the Inland Architect's regular contributors, has of late been complimented by the publication of his article upon "Suburban Architecture" in *The Artist*, of London, England. This journal is a leading authority in Europe upon art matters, and Mr. Jenney's article, written in his fluent, graceful style, suited well the columns of this conservative journal and gave to this architect the just recognition his talent as a writer and experience as an architect seems to warrant. It might here be incidentally mentioned that the name of W. L. B. Jenney is upon the army records as senior captain, additional aide-de-camp in the regular army, and was assigned to engineer duty on the staffs of Gens. Grant and Sherman. The forts at Cairo and Memphis and many field works, during the rebellion, were built by him, his knowledge of military engineering being part of the architectural education acquired at the Ecole Centrale des Arts, etc., Paris, France. In 1876–7 Mr. Jenney was professor of architecture at the University of Michigan.

The following interesting piece of biography we clip from the *Southern Lumberman*, and it is a fitting tribute to true architectural genius and honest endeavor. It is headed "John W. Root," and says: "This rising young architect, at present located in Chicago, is a son of Sidney Root, Esq., of Atlanta, Ga., and grandson, on the maternal side, of the late Judge Clark, of the same state. At the close of the war, when John was still a child, he gave evidence of rare talent for music and drawing. He was sent abroad and entered a first-rate grammar school, but was provided as well with masters specially to teach the subjects of which he was so fond. Returning to New York, where his parents then lived, after a few years, he entered the office of a leading architect of that city, and soon astonished his preceptor by his *facile* drawing and originality of conception. Music supplied his idle hours with a delightful recreation, and by practice added to his natural gifts, he soon became a master of the organ. Upon removing to Chicago some ten years ago, he formed a copartnership with Mr. Burnham, since which time success upon success has attended him, and as some of Chicago's most beautiful buildings are creations of his, monuments to his memory have been unconsciously built which will engrave his name for all time to come upon her historical tablets."

The art of perspective drawing with the architect is not so much a practical necessity as an accomplishment; but the owner's desire for "a picture to see how it will look," makes the accomplishment, when possessed by a practical architect, valuable. Among those who have acquired a reputation for perspective drawing, both in finished water-colors and in the line of free hand sketches or line drawings for illustration, is Mr. Paul C. Lautrup. This gentleman was for a number of years the chief designer in the United States Architect's office at Washington, and latterly with Messrs. Burnham & Root, of Chicago, where, in the capacity of principal draftsman, he has executed perspective drawings of the many large public buildings and private residences which this firm have had in charge. Mr. Lautrup has now placed his services at the disposal of the public, and opened architectural offices at 157 Washington street. His influence has been felt throughout the field of architecture, and as he has given to the younger architects, through his perspective drawings, a knowledge of the finer effects in architectural work, so has he pleased the general public by showing the pleasing features of proposed or completed buildings and perpetuated their architectural details. The accession of Mr. Lautrup to the general field of architecture is a matter for public congratulation, and deserving of much recognition by the future builders of Chicago and the West.



From American Furniture Gazette.

RESIDENCE OF J. H. WRENN, ESQ., CHICAGO.

Chicago Building Permits.

The following permits for buildings to cost $2,000 and over, have been issued since the 20th of April:

John Rinder, two-story dwelling, 24 by 60, 3429 Auburn street	$ 3,000
H. H. Castens, three-story dwelling, 38 by 80, 61 Hubbard street	10,000
F. Kaersten, two-story dwelling, 22 by 60, 242 Vine street	3,200
A. J. Kirkwood, two three-story dwellings, 38 by 62, 336–338 La Salle ave.	6,500
Charles Schwarze, two-story dwelling, 21 by 60, 345 North avenue	3,500
John Kollassa, two-story dwelling, 21 by 56, 30 Bradby street	3,600
John Samp, one-story dwelling, 21 by 50, The field near Clybourn street	2,800
Charles Brejtsprack, two-story dwelling, 22 by 32, 92 Wendell street	4,400
Wm. Froost, two-story dwelling, 32 by 70, 419 Dearborn avenue	20,000
B. Stowell, two-story dwelling, 20 by 50, 459 Dayton street	4,300
E. Sweenie, two-story dwelling, 22 by 50, 453 Taylor street	3,000
J. N. Goger, eight two-story dwellings, 132 by 66, Adams, west of Oakley	24,000
T. A. Herber, two-story dwelling, 24 by 60, 721 Larabee street	7,000
Morley & Ranesdell, two two-story dwellings, 40 by 58, 1000–1002 Adams street	8,000
A. Crane, four one-story dwellings, 20 by 38, Emerald avenue, between 29th and 30th	4,600
Board of Education, three-story school, 86 by 117, Wentworth avenue and 33d street	70,000
James Bachan, two-story dwelling, 44 by 45, 703 W. Chicago street	4,500
M. Buckley, one-story dwelling, 34 by 100, 215 Robey street	6,000
Joseph Kreal, three-story dwelling, 24 by 60, 423 18th street	4,700
J. Anderson, two-story dwelling, 24 by 60, 160 Centre avenue	5,000
A. Watson, basement, 100 by 34, 915½ Depuster street	3,500
H. R. Wilson, two-story store and dwelling, 21 by 37, 629 Monroe street	3,000
Chas. H. Clingman, two-story dwelling, 24 by 39, Washington Boulevard, near Central Park	5,000
Wm. Gregory, two-story flats, 22 by 38, 21 Wesson street	3,500
H. Geselbracht, five two-story dwellings, 100 by 39, 174–182 La Salle avenue	15,000
James Edwords, two-story dwelling, 24 by 60, Wabash avenue, near 34th street	7,000
Wm. Hallmann, two-story dwelling, 24 by 39, 21 Marfaret street	2,600
M. Burback, three-story flats, 22 by 45, 2971 Dearborn street	4,000
T. Jabarek, two-story flats, 21 by 56, 739 Loomis street	4,000
Thomas Farland, two-story store and dwelling, 22 by 59, 274 Loomis st	4,000
B. Schaus, two-story dwelling, 21 by 38, 705 Larabee street	2,000
T. Griffin, three-story dwelling, 26 by 50, 819 N. Clark street	8,000
C. Gekske, three-story flats, 22 by 69, 179 E. Huron street	6,000
James Polka, two-story flats, 21 by 56, 600 Throop street	3,000
James Pelko, two-story dwelling, 24 by 40, 820 Allport street	2,500
H. Pilgrim, two-story dwelling, 21 by 50, 637 Harrison street	3,500
C. Kam, two-story store and flats, 24 by 64, 2604 Wentworth avenue	3,500
Thos. Callagban, two-story dwelling, 20 by 42, 375 Hubbard street	2,000
Mrs. M. Griffith, two two-story dwellings, 33 by 70, 973–975 Adams street	5,000
Chas. Cahagen, three-story store and flats, 25 by 82, northeast corner of North avenue and Dayton street	10,000
O. H. Rocke, two-story barn, 40 by 46, 2442 Michigan Boulevards	3,500
Annie Davies, two-story dwelling, 20 by 38, Vernon avenue	4,000
John Walt, two-story dwelling, 24 by 76, 3448 Wabash avenue	8,000
B. Wolf, two-story barn, 27 by 36, 2448 Wabash avenue	2,000
Anson Stager, one-story addition, 26 by 92, 1737 Michigan avenue	15,000
A. Cumes, two-story dwelling, 21 by 56, Hickory and Judd streets	3,700
Jas. S. Kirk, five-story flats, 60 by 90, North Water near Pine street	25,000
C. W. Morks, one-story addition, 27 by 91, 61 East Washington street	4,000
Wm. Scott, two two-story dwellings, 33 by 48, 857–859 Adams street	5,600
Wm. Dyneewize, one-story dwelling, 25 by 60, 530 Waller street	2,500
A. R. Gordon, two-story flats, 22 by 48, 1177 Jackson street	2,560
Joseph D. Tomaso, four-story addition, 20 by 20, 214 Sangamon street	2,500
Chas. Busom, two-story dwelling, 20 by 50, 513 Sedgwick street	4,800
R. Hill, three-story dwelling, 25 by 80, 254 Ogden avenue	2,000
John Rich, two-story dwelling, 22 by 60, 14 Evans street	3,000
Theo. Johnston, two-story dwelling, 24 by 60, 53 W. State street	2,500
Carl Fenz, two-story dwelling, 22 by 56, 738 Girard street	2,500
Blomgren Bros. & Holersburg, four three-story flats, 100 by 69, 456 to 462 Hurlbert street	35,000
Edward Burk, two-story dwelling, 22 by 40, 500 Twenty-sixth street	3,000
John Murphy, two-story dwelling, 24 by 32, 430 W. Indiana street	2,200
S. Brybejl, two two-story dwellings, 48 by 45, Western avenue and Armitage avenue	4,500
E. Schlick, four-story store and flats, 25 by 94, 437 N. Clark street	12,000
John Roula, two-story dwelling, 20 by 32, 482 Union street	2,500
F. C. McKay, two-story dwelling, 22 by 26, 326 Ashland avenue	3,000
Mary E. Lands, two-story dwelling, 64 by 50, 292 Heritage avenue	9,000
J. B. Quinn, two-story dwelling, 22 by 23, 959 Polk street	2,000
Mathews & Cornwall, two three-story dwellings, 50 by 67, 648–650 Monroe street	15,000
John Rode, two-story dwelling, 20 by 67, 286 Hastings street	5,200
E. B. Wheelock, three-story flats, 25 by 76, 514 Jackson street	7,000
Fred Crumbaugh, three-story flats, 150 by 58, northeast corner College and Rhodes streets	75,000
J. L. Hocibe, two story dwelling, 26 by 55, 900 Ashland avenue	9,000
A. Filhanck, three-story flats, 22 by 60, 436 South Jefferson street	5,400
V. Kindera, three-story dwelling, 22 by 78, 572 Center avenue	6,000
C. B. Formed, two-story stable, 96 by 36, Pearson, near Pine street	5,000
Wm. Shlotterbach, two-story dwelling and store 23 by 62, 455 13th street	4,000
Henry Lift, four-story store and dwelling, 117 by 74, 407–417 North Clark street	35,000
H. W. Martin, two two-story dwellings, 40 by 40, 137–139 17th street	4,000
M. J. Relph, two-story dwelling, 22 by 48, 33 Congress street	2,500
H. H. Aldrich, two two-story dwellings, 38 by 60, 194–196 Ashland avenue	12,000
M. Doorak, three-story dwelling, 22 by 68, 136 Taylor street	6,000
F. Conrad, two-story dwelling, 20 by 67, 539 West 18th street	5,200
C. J. Singer, two-story barn, 73 by 64, 116–124 Lincoln avenue	6,000
Elizabeth Klaner, two-story dwelling, 28 by 60, 596 La Salle avenue	9,000
N. G. Langlois, two two-story flats, 48 by 56, Hensnoy, near Hoyne street	7,000
P. H. Rice, three-story flats, 44 by 65, 46–48 South Carpenter street	15,000
J. Roed, two-story flats, 21 by 56, 392 Water street	5,000
Chas. Dittmen, two-story dwelling, 20 by 40, 60 13th street	2,000
O. Johnson, three-story flats, 23 by 72, 81 West Huron street	4,400
W. B. Ogden's estate, four two-story dwellings, 96 by 73, 380–386 Ontario street	13,000
Thomas Mahoney, two-story dwelling, 22 by 40, 3807 Dearborn street	3,000
Howting & Crawhurst, two one-story cottages, 20 by 32, 32d and Wallace streets	2,000
F. Hardt, two-story dwellings, 25 by 76, 3830 State street	5,700
F. Mackan, two-story dwelling, 22 by 54, 124 Polk street	3,700
Reynolds & Dale, three-story store and dwelling, 74 by 62, 2719–2723 State street	24,000
G. W. Stanford, three two-story dwellings, 50 by 50, 416–418 Jackson street	9,000
Wm. Lang, three-story store and flats, 72 by 65, 2628–2634 State street	15,000
S. S. Greely; three-story dwelling 30 by 42, 56 Bellevne place	7,000
Chas. T. Foerster, two-story dwelling, 40 by 60, 524 Hubbard street	8,500
S. Baragwanath, two-story shop and dwelling, 24 by 56, 1253 Milwaukee avenue	4,000
C. Schumacher, one-story cottage, 23 by 40, 519 Thirteenth street	2,000
C. Lasman, four-story store and dwelling, 25 by 80, 416 Halsted street	6,500
L. C. Kuhnert, two four-story stores and dwellings, 50 by 80, 418–420 Halsted street	13,000
H. R. Sortman, four two-story dwellings, 80 by 38, 323–329 Leswirs street	8,000
Chicago Board of Education, three story school, 117 by 86, Leavett and Lexington streets	80,000
E. F. Johnson, two-story store and dwelling, 24 by 64, 1298 Lake street	2,000
E. P. Palmer, two-story dwelling, 30 by 60, 2839 Prairie avenue	12,000
Jas. Hauska, two-story dwelling, 20 by 20, 113 Brown street	3,000
John Mountain, three-story flats, 25 by 70, 269 Superior street	8,000
W. E. Wimball, two-story dwelling, 25 by 48, Astor near Scott street	6,000
Wm. Griffiths, three-story flats, 22 by 64, 598 North Clark street	7,000
W. B. Murtha, two-story store, 20 by 30, 124 South Halsted street	2,000
J. H. Swan, two-story dwelling, 43 by 79, 2623 Michigan avenue	30,000
Wm. Schall, two-story dwelling, 21 by 70, 772 North Robey street	3,000
A. Newman, two-story dwelling, 21 by 93, 201 Burling street	5,000
G. Hafemuistor, two-story dwelling, 21 by 68, 43 Bissell street	3,500
Chas. Badell, two-story dwelling, 21 by 68, 45 Bissell street	3,500
Wm. Parson, three-story dwellings, 2243 Michigan avenue	7,000
I. Franks, two three-story dwellings, 48 by 55, 482–484 Indiana avenue	12,000
H. C. Brown, two-story dwelling, 22 by 54, Belden near Dayton street	4,000
J. C. Anderson, two-story dwelling, 32 by 30, Polk, near Ogden avenue	3,000
Tobias Samuelson, three-story flats, 49 by 50, Center ave. and Ohio street	10,000
H. Holt, two-story dwelling, 20 by 70, 406 Noble street	3,500
Henry Schroeder, two-story dwelling, 20 by 70, 335 North Ashland avenue	3,000
Bender Bros., two-story dwelling, 20 by 70, 681 Chicago avenue	3,000
G. B. Lathrap, two-story flat, 22 by 45, Webster near Lewis street	2,600
C. K. Beckett, two-story dwelling, 22 by 62, 3640 Indiana avenue	3,000
M. O'Connell, two-story flats, 21 by 60, 300 West 14th street	3,000
Hel. Jones, two-story dwelling, 22 by 52, 481 Warren avenue	3,000
Wm. Juelsdorf, two-story dwelling, 22 by 47, 1012 West 12th street	2,500
Frank O. Ken, two-story dwelling, 24 by 80, 700 Noble street	5,000
Wm. Hoyton & Co., five-story store, 28 by 55, 11 Michigan avenue	5,000
C. Barton, two-story store and dwelling, 22 by 68, 402 North Huron street	3,000
Julius Zittell, three-story flats, 50 by 70, 641–643 Harrison street	12,000
A. Maguson, three-story flats, 30 by 40, 8 West Ohio street	2,500
M. Borts, two-story dwellings, 20 by 60, 878 Twenty-first street	3,000
John Ehlers, two-story dwelling, 20 by 30, 736 Chicago avenue	2,000
John A. Lind, three-story store and dwelling, 42 by 100, Franklin and Ontario streets	20,000
Aug. Bright, two-story dwelling, 21 by 50, 297 Loomis street	4,000
Christ Holz, two-story dwelling, 20 by 50, 165 Webster avenue	2,500
J. Sidlacek, two-story dwelling, 21 by 57, 59 Fisk street	3,400
F. Prindiville, two-story dwelling, 20 by 60, 110 Cornell street	7,000
E. Land, three-story store and dwelling, 24 by 60, 3614 State street	4,500
E. Oleson, two-story dwelling, 19 by 5[illegible], 26 Lemoyne street	2,500
Hammill & Congdon, three-story dwelling, 50 by 70, 273–275 La Salle street	15,000
Christian Reformed Church, two-story dwelling, 22 by 44, 523 West Fourteenth street	3,000
M. E. Johnson & Co., two-story barn, 52 by 64, rear 34 West Twelfth street	2,000
William Hunkel, two-story dwelling, 22 by 48, 451 West Twelfth street	4,500
Barrett & Kemball, two-story barn, 32 by 69, 153 Hooker street	3,000
W. P. Smith, six two-story dwellings, 117 by 45, irregular, 15,000 cubic feet, Rhodes avenue and Thirty-second street	18,000
Aug. Kuha, two-story dwelling, 22 by 50, 151 Fowler street	3,500
Ryan Bros., three-story store and dwelling, 25 by 57, 1199 Milwaukee ave.	3,500
Fred. Krehn, two two-story stores and dwellings, 48 by 80, 484–486 Larrabee street	11,000
A. Kaiser, two-story dwelling, 21 by 60, 148 Maxwell street	3,500

One hundred and fifty-three permits were issued for buildings to cost less than $2,000. The total number since April 20th was 319, total cost aggregating $1,326,150.

Lumber Notes.

About 4,000,000 feet of logs were got in on Beaver creek, Michigan, last winter.

Chicago handles one-twelfth of the entire lumber product of the United States.

Pensacola, Florida, shipped upward of 19,000,000 feet of lumber during the past year.

Mr. G. W. Hotchkiss, secretary of the Lumberman's Exchange, is seeking rest in Europe.

Lake freights for lumber from Manistee to Chicago is $1.75; from Menominee, $1.75; from Ludington, $1.50 and $1.62½; from Grand Haven and Muskegon, $1.37½.

Mr. B. L. Anderson, president of the B. L. Anderson Company, expects to sail on the Cunard steamship Servia, from New York, for a visit to his native land, and will probably be at his post again on or before July 1.

The last lumber dealers' lunch was given by Martin Ryerson & Co., April 27. Messrs. Ballard, Ryerson, Dean, Carpenter, and other veterans in the lumber trade, recalled some of the early anecdotes and incidents of the business.

A recent test of a new method of rendering wood non-inflammable, was made in New York city. The preparation is a chemical one, the ingredients not being made public. Georgia pine charged with it and subjected for thirty minutes to a heat of 2,000 degrees, was only slightly charred. One of the inventors claims the chemicals will protect the wood a number of years.

The quotations for lumber in carload lots is: clears and selects, two-inch plank, from $30 to $47; southern pine flooring, $30 to $35; one-inch finishing, $33 to $45; twelve-inch stock boards, $35 to $39; dressed and matched flooring, $15 to $36; siding, $18 to $21.50; common and cull boards, $11 to $14; timber 4 by 4 to 8 by 8, $14; two-inch joist and scantling, $13 to $15; shingles, $2.90 to $3.10; lath, $2.60.

The sixth annual meeting of the National Association of Lumber Dealers convened at the Tremont House, in Chicago, on the 9th inst. A. H. Trego, of Hoopeston, Ill., presided. This association, which has a membership of over 550 retail dealers in Illinois, Iowa, Wisconsin, Ohio, Indiana, Minnesota, Kansas, Nebraska, Colorado and Dakota, has for its object "the protection of its members against wholesale dealers and manufacturers to consumers, and giving such other protection to its members as may come within the limits of a coöperative association." Seventy-five members were in attendance. General business was transacted and the meetings were made semi-annual, the next to occur the first Wednesday in December, 1883. The officers elected for the year were A. H. Trego, Hoopeston, Ill., president; N. H. Pike, Chenoa, Ill., vice-president; H. M. Dingfelder, Hamilton, Ohio, D. E. Steiger, Cameron, Mo., N. F. Dalton, Vincennes, Ind., directors.

New Patents.

277,156, Fire-Escape Tower. Semon J. Pardessus, Brooklyn, N. Y. Filed February 26, 1883. (No model)
275,799, Window-Refrigerator. Eugene H. Benoist, St. Louis, Mo.
275,802, Sewer-Inlet. Edward Z. Collings, Camden, N. J., and Charles F. Pike, Philadelphia, Pa.
275,803, Sewer-Flushing Device. Edward Z. Collings, Camden, N. J., and Charles F. Pike, Philadelphia, Pa.
275,815, Screw-Tap. Cicero R. C. French, Providence, R. I.
275,816, Fire Escape. David Friedheim, New York, N. Y.
275,832, Door Brace or Stay. Philo J. Lockwood, Auburn, Ind.
275,837, Bath-Room. Jas. C. McLaughlin, Cincinnati, O.
275,838, Water-Closet. Jas. C. McLaughlin, Cincinnati, O.
275,841, Apparatus for making Roofing Fabric. Henry M. Miner, Pittsburgh, Pa.
275,852, Sliding Car-Door Hanger. Edwin Prescott, Arlington, Mass.
275,857, Hydraulic or other Elevator. Gustavus N. Reiff, Philadelphia, Pa.
275,860, Bit-Brace Fastener. Elmore E. Rose, Springfield, Mass.
275,895, Fire-Escape. Haskett D. Eastmann, Minneapolis, Minn.
275,900, Bowl for Water-Closets. Joseph J. B. Frey, New York, N. Y.
275,903, Sash-Holder. Frederick H. Gross, Deer Isle, Me.
275,905, Fire-Escape Ladder. Lucius Hamlin, Sebago Lake, Me.
275,911, File-Handle. Geo. W. Hill, Stark's Point, Wash.
275,933, Fireplace. Garner L. Morrison, Brooklyn, N. Y.
275,950, Elevator. Bradshaw Sewall, Farmington, Me.
275,962, Fire-Escape. William Ulrich, Rock Falls, Ill.
275,978, Strainer for Water-Faucets. Geo. F. Barrington, San Francisco, Cal.
276,000, Spring-Hinge. John K. Clark, Buffalo, N. Y.
276,050, Fastener for the Meeting-Rails of Sashes. Hiram T. King, Rochester, N. Y.
276,057, Fire-Escape. Daniel Luscher, Cincinnati, O.
276,076, Elevator. Wm. H. Ridgway, Coatesville, Pa.
276,081, Permutation-Lock. Rutus Sarlls and Virgil C. Holland, Gainesville, Texas.
276,082, Window-Guard. Bertha Schmitt, Brooklyn, N. Y.
276,085, Metallic Roofing. Emil Severin, Aurora, Ind.
276,090, Fire-Escape. Alfred W. Sperry, Hartford, Conn.
276,102, Chimney-Cap. James H. Watt, Barnesville, O.
276,106, Disinfecting Water-Closets. Horace E. Wells, Cleveland, O.
276,217, Sewer-Gas Trap. Ambrose Blatchly, San Francisco, Cal.
276,219, Window-Frame. William Boisen, Luzerne, Iowa.
276,228, Brick-Machine. Israel Cullen, Pittshurgh, Pa.
276,241, Portable Hanging Scaffold. John H. Hanavan, San Francisco, Cal.
276,247, Mallet. Solon G. Howe, Detroit, Mich.
276,255, Door-Latch. Phillip Mathes, Idlewood, Pa.
276,261, Urinal. James McGinley, Chicago, Ill.
276,293, Lime-Wash for Coating Buildings, etc. Joel H. Sharpless, Kennett Square, Pa.
276,325, Sliding Door-Pull. William H. Andrews, New Haven, Conn.
276,332, Elevator. Cyrus W. Baldwin, Chicago, Ill.
276,333, Door-Latch. Judson A. Baldwin, Shelburne, Vt.
276,342, Door-Latch. Samuel W. Billingsley, Woodberry, Md.
276,357, Deodorizing and Disinfecting Water-Closets, etc. Edward Z. Collings, Camden, N. J.
276,363, Fire-Escape. David Crowley, Washington, D. C.
276,386, Fume-Arrester for Chimney-Flues. Max Freudenberg, Ems, Germany.
276,396, Elevator. William F. Hall and Philip G. Hubert, New York, N. Y.
276,409, Sash-Holder. Numon N. Horton, Kansas City, Mo
276,412, Shingle-Machine. Pleasant R. Houpe, Oak Forest, N. C.
276,416, Window-Sash. Benjamin Hurtubes, Rahway, N. J.
276,423, Chimney-Protector. John G. Keller, Monticello, Ill.
276,436, Float for Water-Closet Valves. Henry S. Lord and Robert E. Day, Hartford, Conn.
276,468, Fire-Escape. Wesley Rees, Memphis, Mo.
276,470, Disinfecting Apparatus for Water-Closets. Charles S. Rice, Jr., Chicago, Ill.
276,476, Boring and Tenoning Machine. William H. Ryan, Belton, Tex.
276,481, Water-Elevator. William M. Scott, Lockport, N. Y.
276,491, Elevator. Charles Lievens Soyez, Brussels, Belgium.
276,499, Method of Treating Lumber. Ephraim J. Story, Washington, D. C.
276,507, Locking-Latch. George H. Van Winkle. Hornellsville, N. Y.
276,509, Sash-Weight. Reuben Vosburgh, Oregon, Ill.
276,511, Spike. Abram Wakeman, Jr., New York, N. Y.
276,540, Hinge. Thomas L. Rivers, Mount Vernon, Ill.
276,541, Wire Nail. William D. Sloan, Brooklyn, N. Y.
276,544, Brick and Tile Machine. Garrett Van Winkle, Avon, Ill.
276,549, Brick and Tile Machine. James C. Anderson, Highland Park, Ill.
276,563, Shutter and Fastening therefor. Jonas Cooper, Washington, D. C.
276,585, Fire-Escape. George Hofmann, Jr., and Austin D. Hoffmann, Chicago, Ill.
276,587, Store. James A. Houston, Boston, Mass.
276,610, Fire-Escape. George W. Lindsey and Harry W. Raleigh, Baltimore, Md.
276,622, Vise. Jacob A. Painter, Arthur, Ill.
276,623, Locking-Latch. Frederick Palmer, Hampton, Va.
276,626, Door-Opener. Martin L. Powell, New Castle, Ind.
276,654, Eaves-Trough Hanger. Jonathan P. Abbott, Cleveland, O.
276,669, Fire-Escape. William F. Clerk, Boston, Mass.
276,715, Fire-Escape Ladder. James Riley, New York, N. Y.
276,730, Fire-Escape. Albert P. Sturtevant, Norwich, Conn.
276,736, Fire-Escape. Henry B. Walbridge, Brooklyn, N. Y.
276,761, Incidence-Window. Friedrich Bredehor-t, Bremen, Germany
276,767, Automatic Elevator-Hatchway Guard. Joseph Byers, Newtonville, and George Taylor, Everett, Mass.
276,784-5, Elevator. Levi Daso, Pioncer, O.
276,815, Fire-Escape. Gustavos Heidel, St. Louis, Mo.
276,831, Windmill and Derrick. Isaac W. Lamb, Parshallville, Mich.
276,849, Safety-Apparatus for Elevator-Platforms. Volney W. Mason, Providence, R. I.
276,858, Door-Lock. Alphonse Montant, New York, N. Y.
276,861, Dry-Pressing Brick-Machine. Henry B. Morrison and George Willett, Motley, Minn.
276,886-7, Window-Sash. Alexander Rudolph, San Francisco, Cal.
276,913, Sash-Weight. Gary B. Smith, Denver, Col.
276,942, Knob-Attachment. Robert S. Watson, Bay City, Mich.
276,958, Spring-Hinge. Charles B. Clark, Detroit, Mich.
276,969, Fire-Escape. Arthur C. Hitchcock, Decorah, Iowa.
276,973, Fire-Escape. George Kelly, Chicago, Ill.
277,053, Device for Lighting Gas by Electricity. John B. Odell, Chicago, Ill.
277,333, Iron Cross-Tie. John Parr, Humholdt, Neb.
277,335, Splice for Telegraph Cables. William R. Patterson, assignor to Western Electric Company, Chicago, Ill.
277,157, Take-up Box for Shaft-Journals. Frank I. Pearce, assignor to Link-Belt Machinery Company, Chicago, Ill.
277,158, Bench Vise. Granville W. Pittman, Keokuk, Ia.
277,060, Machine for Reducing Wood to Paper Pulp. Joshua Prickett, assignor of two-thirds to W. S. Prickett and A. H. Mellen, Marinette, Wis.
277,351, Horizontal Guide for Saws. James J. Sadler, McBrides, Mich.
277,026, Saw-Handle. Joseph Hall and L. St. Andre, Clear Lake, Wis.
277,073, Safety Attachment for Elevators. Peter J. Singer, Chicago, Ill.
277,363, Car-Coupling. Earl S. Smith, Chase, Mich.
227,364, Saw Jointer. William H. Smith, Upper Alton, Ill.
277,212, Elevator. Jacob B. and W. M. Brimer, Richland Centre, Wis.
277,000, Railway Sleeper and Chair. Thomas J. Bronson and A. Armstrong, Jacksonville, Ill.
277,216, Horse-Power and Capstan. Charles C. Brush, Crystal, Ia.
277,407, Furnace. Gustavus E. Buschick, assignor of one-half to C. E. Gregory, Chicago, Ill.
277,109, Washboard. Edward Butzbach, Evanston, Ill.
277,111, Window-Screen. John W. Carman, Fort Atkinson, Wis., assignor of part to E. Terhune, Chicago, Ill., and G. F. Patterson, Fort Atkinson, Wis.
277,224, Rubber Dam-Clamp. John P. Carmichael, Milwaukee, Wis.
277,145, Line-Changer for Telephonic and other Electrical Purposes. Charles H. Lothrop, Lyons, Ia.
277,198, Transmitting Telephone, Receiving Telephone. Myron L. Baxter, Aurora, Ill., assignor by mesne assignments to Overland Telephone Company.

Trimmings and Shavings.

According to the *Wiener Gewerbe Zeitung*, a chemist of Vienna has invented a new kind of glass, which contains no silex, potash, soda, lima or borax. In appearance it is said to be a brilliant crystal, perfectly transparent, white and clear, and is susceptible of being cut and polished. It is completely insoluble in water, and is not attacked by fluoric acid, but can be corroded by hydrochlorie and nitric acids. The most important feature that it possesses is that, when in a state of fusion, it adheres to iron, bronze and zinc.

The National Museum at Washington is supplied with electric apparatus in all its completeness and variety. It is illuminated with the electric light. A system of telephones and electric call-bells furnishes communication between all the rooms in the immense building. Electricity supplies the light to the photographic laboratory, so that the clouds never interfere with work. Sixteen electric clocks indicate meridian time to the occupants of the building. An electric register marks the regular rounds of the watchman, and the raising of any window or opening of a door is at once indicated to the janitor by an electric annunciator. The same system is being extended so as to call prompt attention to the opening of any ease in the museum.

The special feature of the new observatory at Columbia College will be a paper dome. "This will be the fourth paper dome in the world." The first one made is at the Troy Polytechnic Institute, the second at West Point, and the third at Beloit College. While that at West Point is the largest, the one at Columbia College will be the best in construction and arrangement. The method used in the manufacture of the paper is kept a secret, the makers using a private, patented process. The dome is made in sections—semi-lunes, as they are technically called. There are twenty-four of these sections. They are bent over toward the inside at the edges, and bolted to ribs of wood. The thickness of the shell is only three thirty-seconds of an inch, but is as stiff as sheet-iron. On one side of the dome is the oblong opening for the telescope, and over this is a shutter (likewise of paper, but stiffened with wood lining) which slides around on the outside of the dome. "The whole dome is so light that the hand can turn it. The inside diameter is twenty feet and the height is eleven feet. The floor of the observatory is one hundred feet above the ground; because of the tall buildings around it. The building is rapidly approaching completion, and the dome is already in place."

Our Illustrations.

The illustration on page 57 is a residence built for J. H. Wrenn, Esq., by Messrs. Burnham & Root, architects. The perspective was drawn by Paul C. Lautrup. The building is of brick, with terra-cotta ornamentation. A large quantity of stained glass is used for interior and exterior effect, and the woodwork is preserved in its natural colors.

Page 51, Medical College of the State University of Iowa, at Iowa City, Iowa; John C. Cochrane, of Chicago, architect. The building was completed during the past fall at a total expenditure of $30,000. The building is 60x84 feet, four stories and basement in height. The walls are of pressed brick with stone trimmings, and the basement walls are of rock-faced stone. The interior is finished throughout in an appropriate manner. In the basement are two large anatomical rooms, besides a reception room. From this reception room to the fourth floor is an elevator, with doors at each story. The fourth story is entirely occupied by a dissecting-room, lighted by windows on the sides and also from a skylight above. The other floors are devoted to the lecture-rooms, professors' rooms, microscopical rooms, laboratory, museum, etc. These are well arranged and abundantly lighted. A commendable feature of the interior arrangement are the stairways, those for the students being entirely separate from the main entrance. The heating is accomplished by steam, both direct and indirect radiation being used. The plans of the principal floors are given.

Exchanges Received.

The Decorator and Furnisher, New York; *The Mississippi Valley Lumberman*, Minneapolis, Minn.; *The Painters' Magazine*, New York; *Building*, New York; *The American Furniture Gazette*, Chicago, Ill.; *American Architect and Building News*, Boston, Mass.; *The Watch-Maker and Metal-Worker*, Chicago, Ill.; *The Sanitary News*, Chicago, Ill.; *The Carpet Trade and Review*, New York; *The Furnisher*, Chicago, Ill.; *Dubuque Trade Journal*, Dubuque, Iowa; *The Carpenter*, New York; *The Artist*, London, Eng.; *The Southern Lumberman*, Nashville, Tenn.; *The Indicator*, Chicago, Ill.; *Lumberman's Gazette*, Bay City, Mich.; *Southern Manufacturer and Builder*, Louisville, Ky.; *The Painter*, New York; *Art Interchange*, New York; *U. S. Monthly*, Chicago.

New Publications.

MODERN PERSPECTIVE: A treatise upon the principles and practice of plane and cylindrical perspective. By William R. Ware, professor of architecture in the school of mines, Columbia College. James R. Osgood & Co., publishers. In Chicago, S. A. Maxwell & Co. Retail price $5.

This work consists of a series of papers upon perspective, which appeared originally in the *American Architect and Building News*, revised and having several additional chapters and pages of illustrations. The subject is treated in a simple, practical and comprehensive manner, and much is made clear that is not commonly understood. Supplementing the discussion of plane perspective by several chapters on cylindrical or panoramic perspective, is a feature of value to the landscape painter or the historical painter, as well as to the architect and draughtsman. The fresco painter and the scene painter are instructed in the ways for limiting the space required for making drawings in perspective, enabling them to adapt a proportionally large picture to the size of the room in which it is to be produced. In this connection the views of the author are novel and interesting. The book is accompanied by a portfolio of valuable plates illustrating the text, and greatly facilitating the study. All who have to do with perspective drawing, will find in this book much to interest and instruct.

PRACTICAL CARPENTRY, a guide to the correct marking and laying out of all kinds of carpenters' and joiners' work with solution of the various problems in rip-roofs, gothic work, centering, splayed work, joints and jointing, hinging, dovetailing, mitering, timber-splicing, hopper work, skylights, raking mouldings, circular work, etc., to which is prefixed a thorough treatise upon carpenters' geometry. By Fred T. Hodgson. Industrial Publication Co. publishers, New York, 1883. Price $1.

To give a description of this little work would be to write a treatise incorporating nearly every fact and figure that comes to the carpenter in a life's experience, and the information is so compact, clear and concise that the reader can understand the explanations of the most difficult problems as clearly as if his boss or his benchmate were laying down the law and emphasizing it with a hammer on the end of a jackplane, and when the subject is finished it is like the jackplane after the hammering—it is *set*. Mr. Hodgson, in his works upon carpentry and its individual branches, has the happy faculty of making his explanation perfectly clear, and displays not only a most thorough knowledge of the subjects handled, but a knowledge of the wants of the class he is seeking to instruct and benefit. Like "The Steel Square and its Uses," "The Builders' Guide and Estimator's Hand-book," this volume of "Practical Carpentry" is all, and a great deal more, than it pretends to be. With its varied and important information upon questions that come to the workman in some shape every day, it should find a place in the tool-chest of every carpenter in the country.

AMERICAN COTTAGES, consisting of forty-four large quarto plates containing original designs of medium and low-cost cottages, seaside and country houses, etc., together with form of specification for cottages. William T. Comstock, New York.

These designs, of which a majority have been published in a building journal issued by the publishers, have been carefully compiled in quarto form, and in an illustrative way exhaustively discuss the subject of cottages at moderate cost. There is a great demand throughout the country, the West particularly, for just such designs. In many towns an architect is not available; and if he is, the multiplicity of designs will materially aid in the selection of a plan suiting the needs of the prospective occupant. The plans are from the hands of some of the best known and talented architects, and saying that each plan has greater or less merit as the outline of a convenient and well-arranged house, is but doing justice to the gentlemen whose professional services have from time to time been required to solve just such problems as some of these cottages present, viz: How to obtain a neat, well-arranged and convenient cottage at a moderate cost. As a collection of solutions to the interrogation of all prospective builders, we heartily commend "American Cottages."

The publishers of *The Art Interchange* announce that the "Notes and Queries Department" of that journal is growing so rapidly in popularity that it is somewhat difficult to find space for answers to all the questions addressed to it. They have decided, therefore, to issue an eight-page extra on May 22, thirteen columns of which will be given up to notes, queries and answers, treating, among other subjects, on artistic furnishings, embroidering, repousse work, wood carving, decorative oil painting, stencilling, painting on china, and leather work. This department is of great practical benefit to all interested in art. The extra will be furnished free to regular subscribers of the *Art Interchange*, and can be bought by others through news companies for ten cents, or by addressing the *Art Interchange*, 140 Nassau street, New York.

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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 5

JUNE, 1883.

THE

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IN THE WEST.

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Numerous letters have come to us from New York, Boston, St. Louis and other points complaining that the writers had subscribed for THE INLAND ARCHITECT AND BUILDER and not received it. Investigation shows that a swindler named W. H. Gault has been personating in the East R. C. McLean, editor of this paper, and he has harvested a large number of subscriptions. Gault is rather under medium height, has light complexion, and a peculiar, one-sided appearance of the mouth. In St. Louis a number of subscriptions have been taken by a fraud signing himself W. H. Barker, agent. He is described as being about 45 or 50 years old, some six feet tall, and with grayish hair and beard, and a smart talker. These men are impostors, and are wholly unauthorized to represent us in any way. Subscribers should insist on canvassers showing satisfactory credentials from this office or from responsible subscription or news companies. If circumstances are suspicious, send subscription direct to this office.

IT is to be hoped the present investigation into the administration of the office of supervising architect at Washington, ordered by the secretary of the treasury, at the instigation of Mr. Murch, will not prove to be another calsomining job, and that the irregularities, to put it tenderly, that cannot possibly be kept out of the evidence, be accounted for as trivial misdemeanors magnified into heinous offenses by the bitterness of partisanship—that convenient scapegoat for saddling the sins of unfaithful public servants lest they "may hurt the party," but that it will be sufficiently thorough to expose so much of the rottenness of the office of supervising architect, as it now exists, as to cause the next congress to abolish the "place," more especially since it appears like a fungus that has attached itself to and grown upon the department of the treasury without warrant of authority or justice. Therefore, it is not so much a question whether Mr. Hill has been guilty of malfeasance in his transactions at Cincinnati, Detroit, San Antonio or Dix Island, as is alleged, or not, that we are glad to see this investigation going on, however it may add to the expense of the already too costly luxury, for there is a possibility it may show the inutility of the office and its incompetency to meet the needs of the government in regard to the public architecture; and, perchance, provide a way whereby the government may in some measure be able to erect its edifices as symmetrically, substantially and economically as private individuals and corporations do theirs. Surely there are costly abortions—enough Chicago custom houses, with the keystones of the arches tumbling out of their places, erected over the country under the administration of this office to warrant a change of base in the methods and manner of constructing the government buildings, and to put the trust where it is less likely to be abused.

A RATIONAL change would be to the corps of topographical engineers, which corps might be made still more efficient by creating a "chair" of architecture to the professorships at the West Point Military Academy. Certainly, if nothing more, such a change would take the trust out of the hands of individuals whose tenure of office depends on the caprice of politicians, and place it in the hands of men who are trained to believe it is as dishonorable to rob a government as an individual; and, moreover, are stable in their places, and not dependent on any other emolument than that accorded by the country in their generous salaries and allowances. That we are not amiss in the capability of this corps for such a duty we may cite the saving to the government of hundreds of thousands of dollars in the construction of the war department building since it was turned over to the corps from the supervising architect's office, and to the achievement of Col. Casey, placing a foundation under the Washington monument after it had attained an elevation of 150 feet, embracing a weight of material of 71,500,000 pounds. Placing the *supervision* of the government architecture in that quarter, then the plans of any projected buildings could be thrown open to the architects of the country for competition, and their construction to the contractors, under the specifications, as all army contracts are. We are confident such a disposition of the government construction as this would meet the approbation of all intelligent architects and contractors, feeling, as they would, that their plans and bids would fall into intelligent and disinterested hands. By

the word "supervision" as applied to corps, we mean that both architect and contractor should be dealt with and be treated by the government as by private individuals and corporations—that the board of engineers, after accepting any plan, should merely see that each did his duty to the government, the architect in the supervision of the building of his plan, and the contractors in the performance of the work. By some such method as this only can the robbery of the treasury be stayed from men easily demoralized by the handling of public moneys, and a comelier, better and cheaper class of government buildings be constructed. If this Mureh-Hill imbroglio will secure such a desideratum it will be money well spent, even if the commission of inquiry have to go junketing over the country as Mr. Mureh proposes.

NOW that the "brieklayers' strike" has succumbed, as indicated in our last issue, to the inevitable of an untenable position, it would be well if the participants in the self-imposed idleness would look the ground over and view the extent of the folly of following counsels of chronic agitators. The evil that has attended their unjust demand has not been simply a loss to themselves, in the money spent during the strike and the loss of money that might have been earned during the last and best three months of the building season, which have been sacrificed to it, but they have visited the same misfortune upon thousands of other fellow-workmen—carpenters, painters, glaziers, plumbers, etc., who might have been profitably employed upon the hundreds of buildings that might have been constructed up to this time had they met the equitable propositions made by the Builders' Exchange, through its honorable and fair-minded secretary, Mr. Prussing, in a corresponding spirit of compromise. There is not one of the late strikers who would not smile with derision should a clothier insist on his paying as much for a cheap and inferior suit of clothes as for a good one, on the ground that it was *a suit of clothes*, and yet such a proposition is no more unreasonable or ridiculous than the position of their Union as to wages. Nor was the stand relative to apprentices any more reasonable or just. It is to be hoped, for the sake of the workingmen themselves, that Chicago has seen the last of these miserable strikes which the world over only ripens as its fruitage distress and destitution. Any wrong that can be righted, can be righted in a better way than through a method which interferes with the general weal, and drives away in consequence the sympathy that might elsewise be invoked.

A UNIVERSAL or international exhibition for the display of all the different agricultural products, manufactures and fine arts of the world will open at Nice, France, December 1, 1883, to close May 1, 1884. It is organized under the patronage of the French government, the department of the Alps, and of the city of Nice. The committee for the United States is appointed from among the graduates of French schools. The territory tributary to Chicago is represented by W. L. B. Jenney, in the Lakeside building. The time of preparation is short, as all applications must reach Nice on or before July 15. Mr. Jenney can supply blanks for application, and any information that may be desired. There is a growing disposition throughout the civilized world to teach the people by making them familiar with foreign methods, and the French people are among the foremost in the promotion of these collected examples of the world's work.

MR. BRIGHT, in his appalling statement as to the number of families in Glasgow living in one room, is capped by the statistics of overcrowding in France given by M. Waudand, in his bill dealing with unhealthy tenements. According to this legislator there are 219,270 houses in France without any window whatever, and to which air and light is admitted through the door, or a hole in the door, which has to be stopped in wet or cold weather.

According to the advance sheets of the Tenement and Factory Inspector's report, we have a very similar state of affairs at home—here in Chicago. This investigation shows there are 6,000 tenement houses in all the wards, with the exception of the Fifth and Twelfth wards, the statistics of which have not been made out. These houses contain 100,000 people. Taking the Sixth, Seventh and Eighth wards as examples of over-crowding, the following disgraceful exhibit is made:

In the Eighth ward there are 160 tenement houses with 3 families in each; 80 with 4 families in each; 54 with 5 families in each; 65 with 22 families in each; 7 with 17 families in each; 8 with 9 families in each; 9 with 6 in each; 10 with 5 in each; 11 with 4 in each; 12 with 2 in each; 14 with 2 in each, and 33 with 1 in each. In the Sixth ward there are 362 houses with 3 families in each; 304 with 4 in each; 82 with 5 in each; 38 with 6 in each; 8 with 7 in each, and 3 with 8 in each. In the Seventh ward there are 316 houses with 3 families in each; 195 with 4 in each; 54 with 5 in each; 21 with 6 in each; 8 with 7 in each; 3 with 8 in each; 3 with 9 in each; 1 with 11, and 1 with 12 families in each.

Many of these tenements are in such a filthy condition from defective drainage, overflowing vaults, stagnant water, and generally dilapidated condition, as to be unequaled anywhere else in the world. If there is no authority for razing such hotbeds of pestilence which are a standing menace to the general health of the city, there should be, however it may strike the cupidity of their owners, and some device, more effective than our present building inspection laws appear to be, to prevent their repetition in the sham tenements that continue to be built in every district of the city, which must of necessity, in a few years, degenerate into the same class of places.

IT is an indisputable fact that all buildings reaching an altitude of six or seven stories and not thoroughly fireproof are a menace to surrounding property in case of fire, being beyond the limit of effective work of the fire department, and the growing tendency to erect buildings of ten or more stories has decided the Board of Underwriters of this city, after a failure to get the city authorities to act, to take a stand, which declares if property owners will put up buildings of excessive height they must construct them as nearly fire-proof as possible, elsewise the underwriters of this city will decline to write any insurance upon them except at excessive rates. At the recent meeting, the board passed the following schedule of rates, to meet the emergency:

The present basis rate of the board for a building eighty-five feet high (five stories) is 85 cents on the $100. The new rates do not affect buildings below eighty-five feet in height; but for every ten feet above that height increase the addition for the preceding ten feet 10 cents. Thus the addition for the first ten feet (over eighty-five feet) will be 15 cents; for the second ten feet, 25 cents; for the third ten feet, 35 cents, etc., making the basis rates as follows: Buildings 85 to 95 feet in height, $1.00; 95 to 105, $1.25; 105 to 115, $1.60; 115 to 125, $2.05; 125 to 135, $2.60; 135 to 145, $3.25; 145 to 155, $4.00.

This tariff is put on to control the erection of such buildings, and it is in the power of the secretary of the board to add to these rates if in his judgment the nature of the case demands it. Of course, if an owner puts up a fire-proof structure he will not have to pay these penalty figures, as they are only intended to meet the case of lofty "fire-traps," and we are glad to know the views of the leading architects are in accord with the board.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART IV.

THE fundamental principal of all art is truth, ennobled and idealized. The primitive huts are but the rudiments of architecture; they represent, under different circumstances, the simple solution of the problem of a shelter, told in the most straightforward, truthful manner, for falsehood in architecture, in the shape of columns serving no purpose, or galvanized iron painted and sanded to imitate stone, are refinements due to civilization. The Parthenon at Athens is but a hut ennobled and idealized, although, probably, all in all, the finest piece of architecture the world has yet seen. An epic poem cannot deal with common-place, every-day affairs, but only with noble and great events, idealized and told with dignity and style. But what is style in art? A style of architecture can be entirely destitute of style; the words are not at all the same.

Violet le Duc says: Style consists in distinction of form; it is one of the essential elements of beauty, but does not in itself constitute beauty. Civilization dulls, but does not destroy those instincts in man which lead him to put style into his works. These instincts act in spite of ourselves.

In the midst of society one occasionally distinguishes one person above all others, that we describe as *not handsome, but stylish.* The human species is so often marred by false education, by moral and physical infirmities, that it is unusual to meet with style in one of its members. But (to continue to quote from Violet le Duc) animals, as distinguished from man, always possess this harmony, this perfect conformity between the envelope and the instinct, the breath which makes them live. All, therefore, from the insect to the noblest quadruped, have style, among them a false gesture, a movement which does not clearly and directly indicate a definite intention, a desire, or a fear is impossible; they are never affected, mannered or vulgar. Whether beautiful or ugly, they all are stylish, because their instincts are simple, and the means by which they accomplish their purposes direct and natural. But man, and especially civilized man, as he is an extremely complicated animal, as he is transformed by an education which obliges him to contend forever against his instincts by self-denial, in short, to obtain *style* must, so to speak, make a retrospective effort, that is, be natural. It is worth our while to dwell somewhat at length upon this subject of style in art, for it is but little understood and little appreciated, and yet there is no grand art without style. The best essay I have found on the subject is the Sixth Discourse on Architecture, by Violet le Duc, written for the Ecole des Beaux Arts of Paris. I need not apologize for quoting so often from this author, who has written upon every important architectural subject, in a manner clearer and more to the purpose than any other; let us see what he says on style in art, and try to learn what it is, that we may with certainty recognize it, and even produce it in our own works, for it can be found in the hangings of a window, the papering, and even in the arrangement of the furniture of a room.

We have today become strangers to those elemental and simple ideas of truth which lead architects to give style to their designs, it is, therefore, necessary to define the constituent elements of style. The arts have style when they express the necessities which called them into existence. The architecture of the Roman decline and that of the eighteenth century have no style whatever. The same is true of the lower empire and the reign of Louis XV, for their great defect is that they manifest an evident contempt for the true form expressive of the object and its usage. Nature in all her works has style, because, however varied her productions may be, they are always submitted to laws and invariable principles. We can spare nothing from a flower because in its organization every part has its function, and is formed to carry out that function in the most beautiful manner. Style resides in the true and well-understood expression of a principle, and not in an immutable form; therefore, as nothing exists in nature without a principle, everything in nature must have style, hence the rule: Proceed like nature in her productions that you may be enabled to give style to all the conceptions of your brain.

Architecture to possess style must be governed by the following great principles: 1. Satisfy the requirements in the most direct manner. 2. By correct proportions and pleasing composition make the construction ornamental. 3. For further ornament decorate the construction, and be sure that this decoration, be it ever so simple, is the best of its kind that can be procured.

Some ten years ago England and this country were in possession of a true style, well adapted to the climate and the habits of the people. It was based in its beginnings upon English gothic—which was a true style of the English people, although originally brought from France. The educated architects of both England and this country were all working to one end, "*the perfecting of this style,*" and a brilliant future seemed near at hand, but unfortunately it became the fashion, and fashion loves change. Mr. Normon Shaw, in a lecture before the Institution of British Architects, called attention to some picturesque effects in the transitional architecture before the time of Queen Anne. The young architects, ever hunting after novelty, made designs in the so-called Queen Anne style, and the so-called style became the fashion, although it violates the three principles I have just enumerated, and for this reason will not last long. Architecture should not be subject to the caprices of fashion. We do not build houses as a lady buys a bonnet, for a single season, then to be thrown away as *horrid ugly*, although a *perfect jewel* of a bonnet when purchased two months before. Architecture is worthy of nobler treatment. All the true styles that have ever existed were due to an earnest, fixed purpose, persisted in for a long period by both architects and their clients. The architects should guide and teach, the clients should assist, and to this end architecture should be studied as a part of general culture. This is done in other cities. In Cincinnati there are classes of ladies who meet regularly to read and to listen to discourses under the direction of an employed teacher, and disputed points are discussed in society as a subject of interest. I think that the uniformly good recent architecture of that city is in part due to this cause, for the client assists the architect and stimulates him to exertion.

So far in this introduction we have only inquired, what is architecture? Another and kindred question is, what is an architect? Vitruvius, twenty-five years before Christ, endeavored to answer that question. He says: "Architecture is a science arising out of many others and adorned with much and varied learning. Practice and theory are its parents. An architect should be ingenious and apt in the acquisition of knowledge. Deficient in either of these qualities he cannot be a perfect master. He should be a good writer, a skillful draughtsman, versed in geometry and optics, expert at figures, acquainted with history, informed on the principles of natural and moral philosophy, somewhat of a musician, not ignorant of the sciences both of law and physic, nor of the motions, laws and relations to each other of the heavenly bodies, etc., a list too long to enumerate. Unless acquainted with history he will be unable to account for the use of many ornaments he may have occasion to introduce. For instance, should any one wish for information on the origin of those draped matronal figures crowned with a mutulus and cornice, called Caryatides, he will explain it by the following history: Carya, a city of Peloponnesus, joined the Persians in their war against the Greeks. These in turn for the treachery, after having freed themselves by a most glorious victory from the intended Persian yoke, unanimously resolved to levy war against the Caryans. Carya was in consequence taken and destroyed, its male population extinguished and its matrons carried into slavery. That these circumstances might be better remembered and the nature of the triumph perpetuated, the victors represented them draped and apparently suffering under the burden with which they were loaded, to expiate the crime of their native city. Thus, in

their edifices did the ancient architects, by the use of these statues, hand down to posterity a memorial of the crime of the Caryans. Many other matters of history have a connection with architecture and prove the necessity of its professors being well versed in it. Moral philosophy will teach the architect to be above meanness in his dealings and to avoid arroganee, and will make him just, compliant and faithful to his employer, and what is of the highest importanee, it will prevent avariee gaining an ascendancy over him, for he should not be occupied with the thoughts of filling his coffers nor with the desire of grasping everything in the shape of gain, but by the gravity of his manners and a good character should be careful to preserve his dignity. Law should be an object of his study, especially those parts of it which relate to party walls, to the free course and discharge of the eaves waters, the regulations of cesspools and sewerage, and those relating to window-lights."

Remember, this was written over nineteen hundred years ago. Vitruvius quotes from the commentaries of Pythias, one of the ancients, the architect of the temple of Minerva at Priene, who says that an architect should have that perfect knowledge of each art and science which is not even acquired by the professors of any one in particular, who have had every opportunity of improving themselves in it. This is what an architect should be, from the standpoint of the most ancient writers. Architects must have been made of sterling stuff in those days, or they must have failed to fill the bill.

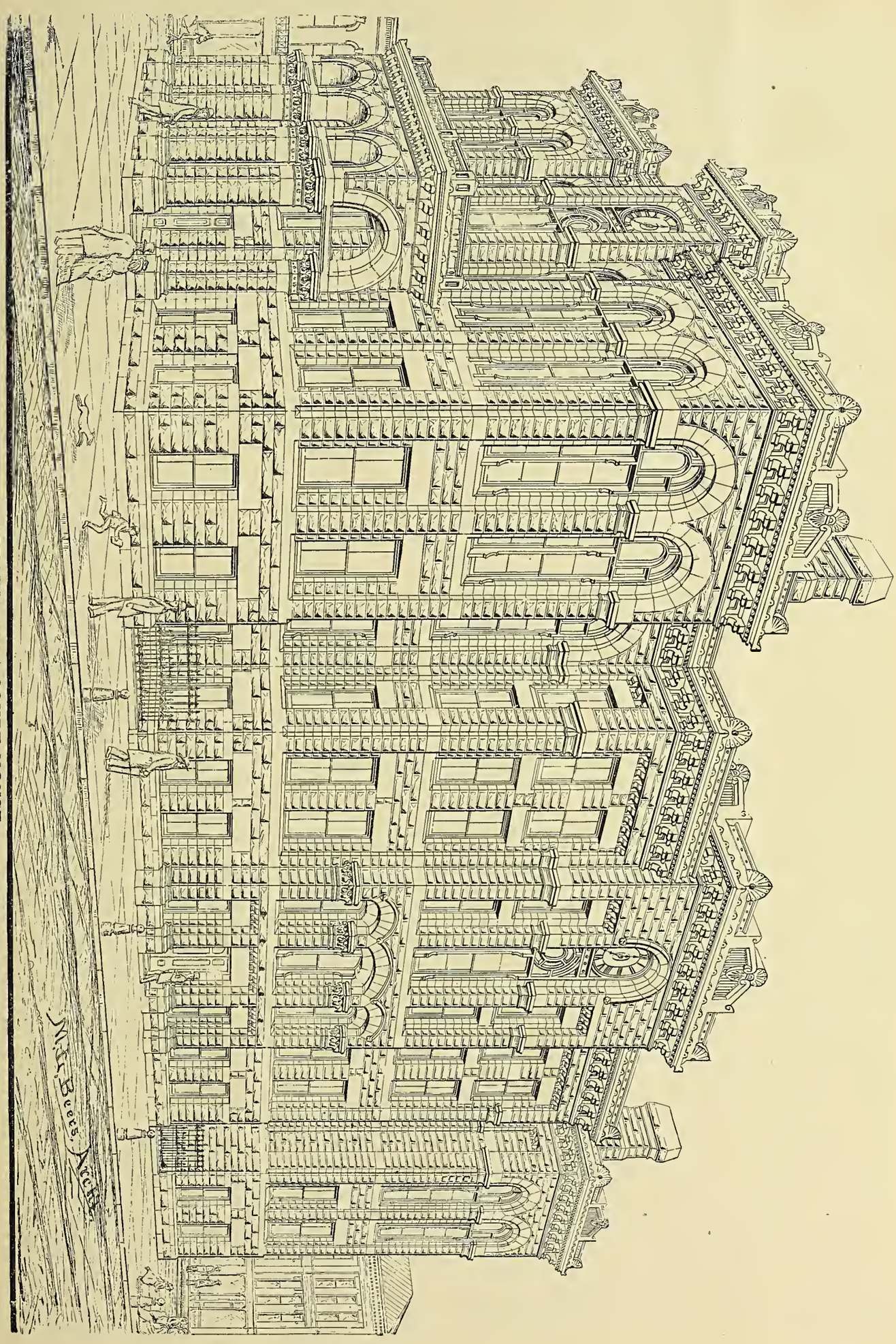
What I have endeavored to show in this introduction is, that the styles of architecture that have at different periods and in different countries arisen, flourished and passed away, did not burst full-fledged into being, but were evolved from low beginnings or from other styles, under the influence of race characteristics and the conditions of the environment. We have seen that all primitive architecture is good, because it is natural; the requirements are simple and rational and are satisfied in the most direct manner, and all the fundamental principles are observed. Primitive architecture possesses style.

History of Chicago Architecture.

PART IV.

RECOLLECTIONS OF JOHN M. VAN OSDEL.

IN the early days of Chicago, architects and builders had to contend with difficulties in the construction of their buildings, now obviated and very nearly forgotten. It will be interesting to note some of these embarrassments, and the efforts made to surmount them. It will be remembered that the original surface of the ground, on which the principal part of the city stands, was swampy, and but slightly elevated above the surface of the river, consequently cellars, or basements under any building, sunk below the surface of the ground, were impracticable. The strata underlying the city was first a black loam a foot in depth, then three or four feet of quicksand, to a solid stratum of blue clay, impervious to water. This sand in wet seasons became saturated with water, which could not pass downward into the clay, nor laterally as there was no inclination of the strata. There was nothing left but evaporation, which at times was a very slow process in rendering the soil firm and dry. In digging post-holes or trenches for foundations, the water would fill such excavations full to the surface of the ground, and sometimes a little above, as in case of setting a post, the more the filling was rammed the more liquid it became, and the water would rise to the top of the filling. A majority of the earlier frame buildings rested on posts sunk through the quicksands to the clay. The greatest difficulty was experienced in the arrangement of the necessary privy-vaults. They would fill with water to the surface of the ground. An embankment had to be formed around them to prevent their overflow, and they required constant watchfulness to keep them in a moderately sanitary condition. As early as 1835, Mr. Anson Sweet, a trustee of the village, constructed a large sewer of plank under the west side of Dearborn street, from the river to Lake street, and was censured somewhat on account of its expensiveness. This was the first attempt at public sewerage. The city council, in 1846, conceived the project to surface drain the city by cutting down the streets, so that the surface water of the adjacent blocks might be drained to the river. This unwise movement was carried to the extent of excavating in front of several blocks on Lake and Randolph streets, but was stopped by an injunction of property owners. The streets were refilled, and in a very few years it was difficult to find out who was responsible for the suggestion of making a second Venice of Chicago, with canals in place of streets. About 1847, the owner of a brick building on the southwest corner of Lake and State streets, determined to have a cellar under his store. He made the necessary excavations, and succeeded in planking the bottom and walls with three inch plank, caulked and pitched the seams, rendering the basement water-tight. The depth was about five feet. Upright posts were placed between the floor and ceiling to resist the upward floating tendency of the cellar floor; but it was soon discovered that the hydrostatic force was more than equal to the weight of the principal floor, and all the goods resting thereon; and an upward movement of the interior of the building was manifest. The ark was scuttled, and filled in with earth, thus ending the first attempt at cellar construction in the business portion of our city. The brick buildings, erected in Chicago prior to 1852, were remarkable only for their severe plainness and simplicity. The builder or architect who could give the most building for the least money was preferred. There were but few capitalists, and our young business men were careful of their resources, and very reluctant to indulge in architectural ornament or other extravagance in their business buildings. The increase of wealth and prosperity permitted in after years these same prudent men to indulge their latent taste and desire for the beautiful, in causing the erection of many business edifices that would ornament and adorn any city in the world. There were other difficulties besides the want of capital and sewerage. The nearest quarry, from which stone suitable for cutting could be obtained, was at Joliet, some forty miles distant, and no conveyance except by wagon prior to the opening of the canal in 1848. The Seammon school building, erected in 1846, on West Madison, near Halsted street, had its caps, sills and water table cut at Joliet, and transported by wagon to Chicago. The Tremont house, 80 by 180 feet, five stories high, was furnished with cut stone from Lockport, New York. The sewerage of this building was conducted by a plank drain, and connected with the "Anson Sweet sewer," before referred to. The court house or city hall, located in the center of the public square, built in 1853, had its entire exterior walls of cut stone from the Lockport, New York, quarries. At this time quarries at Athens and Lemont, about twenty-six miles from Chicago, had been opened, but were not sufficiently developed to furnish stone for so large a building. In 1855, a board of sewerage commissioners was appointed, under the administration of Mayor Levi D. Boone. The board selected Mr. E. S. Chesbrough as chief engineer, and a system of sewers was devised and adopted, necessitating an elevation of the street grades six or seven feet. The project met with much opposition, as it would elevate the side walks nearly to the center of the height of the first story of many buildings, and it was questioned whether filling could be obtained to raise the streets to the great height required by the new grade; but the sewers were a necessity that could no longer be dispensed with, and the people submitted gracefully to the inevitable. The work was necessarily gradual. New buildings were made to conform to the established grade, and the old ones were raised to the required new position by a very simple and ingenious application of jack-screws, resting on foundations of timber. The Tremont house, a massive five-story brick building, was raised about seven feet, and a new basement constructed under the entire building. About 3,000 screws were employed in this performance. It was found that the sewers would allow an excavation of eighteen inches or two feet of the original soil, the earth so removed to form the new cellars or basements, proved to be sufficient for filling the streets to the required new grade.



OTTAWA (ILL.) COURT-HOUSE.

Art of Pure Color.

BY JOHN W. ROOT.

THE arts called "Fine" may be described as either intellectual or emotional. The first division would include fine arts in which intellectual analysis is consciously employed in approximately all stages of their recognition; the second, those in which any such analysis is merely rudimentary, being the simplest form of cognizance.

Arts of the intelligence are in general mensurable; their subtlest distinctions may be measured by a two-foot rule. Architecture and sculpture are tangible, appealing directly to the mind, where their various differentiations are immediately recognized, carried forward from point to point, and at last resolved in the fundamental compound state called pleasurable.

Architecture is the oldest of the fine arts. It sprang into being in response to an immediate and pressing need. It was almost contemporaneous with the shelter afforded by a bearskin, and was only grandchild to a fig-leaf. The earliest Troglodyte was only a man about to build a house, and the earliest lake dweller was only a man who had just moved in. In both these cases, however, the idea of mere shelter was evolved before much thought was given to the decoration of the house, and it was only after shelter was obtained that sculpture followed, and architecture, as we understand it, arose.

These two arts remained for centuries sole ministers to man's craving for æsthetic gratification. Yet in both it was an almost immeasurable time before the "fineness" of art passed in architecture beyond the decoration of most essential and structural elements, or in sculpture beyond the rude record of observations. At last painting came into being, remaining a long time essentially sculpturesque, but finally taking upon itself individual character and functions. In its sculpturesque state, it was like sculpture, an art of the mind. In its last estate, it became an art of the eye, but it never escaped the realm of both intelligence and emotion. Sometimes it dealt more largely with the intelligence, like sculpture; sometimes appealing more pointedly to the emotions. So that in painting, these two human faculties met upon one plane. Centuries after the birth of painting, music came, and in all of its manifestations the emotions are as deeply involved as is the intelligence in architecture. Indeed, the most highly trained mind has but little advantage in music over the least trained, except only as it may be specially trained to hear analytically, a process related to mere hearing as an opera-glass is to mere seeing.

This development from an art based upon simple need to one of pure emotion, it will be readily seen, has been curiously inverted. It begins with intellectual conventionalization, for which there existed in all nature but few analogues, and closes with an idealization, for which there are none: the savage devoid of mind creates the mental arts, the European of repressed emotion, the arts of emotion.

This, true as it is of all the arts, is also true of each, for each begins—a feebly expressed idea—takes upon itself fuller form and development, and finally becomes expressive of elemental emotions. In the case of painting and music this is notable. Painting begins with a rude drawing, in which is latent rather the painter's conception than the thing itself; finally the painter of trained eye reproduces what he sees. Thus music begins as a mere setting to words; its very scale originated in the inflections of the human voice in speaking. Yet, little by little, words contribute less to it, until it finally takes upon itself forms which words cannot express, and gives utterance to emotions, but for it voiceless.

In what I have hitherto said I have used the words "emotion" and "intelligence" so frequently that it seems necessary for me to restrict their meaning from their commoner uses. By emotion, I mean sensations which are elemental, which, as I shall point out, we share with the greater part of all creations. Intelligence, I use to mean either immediate cognition, or sensations resulting from personal experience. It is in these senses that, in painting, form appeals directly to the mind, color to the emotions, just as in an oratorio or opera the mind is directly interested in the words, while the emotions are more moved by the music.

This recapitulation has been necessary, so that in summarizing the recognized and developed fine arts we should be brought to ask if there be not one which stands to painting as the music of an oratorio stands to its words, which, as music, shakes off the needless help of words and finally becomes symphonic, will free itself of all incumbrances of form and vindicate its right to separate existence.

Till within a few years color has been the most servile of handmaids, dependent almost for its existence upon all sorts of conditions foreign to its deeper nature. It has been applied to tattooing, to dyeing clothes, to staining walls and decorative hangings, to painting friezes and columns. It has been used for filling in the outlines of figure drawings, and finally for reproducing in painting the tints of the landscape. In all these uses, however, it was entirely subordinate, being at no point recognized as a thing of itself, but always as a slave to something else.

Ruskin, a few years ago, called attention to the fact that in nature color was not applied according to the rules which were recognized in form; that the color of objects in nature was rarely coincident with their form, but generally overlaid it in waves and flamings, without any consideration to the outlines of the object decorated by it. He then proceeded to point out certain laws, by which its application and tones were apparently determined, as guides for painters and architects. Yet in his analysis of the subject he seems curiously blind to the right of color to be recognized as an independent art, and was so far astray in his perception of its proper and higher function that, in the whirligig of time, he found himself arrayed against Whistler, in a cause where Whistler was the real apostle of color, for in this now famous suit it was shown that what Whistler was really doing was to show upon canvas phases of nature most widely separated from definite form, while his obvious misfortune was that he lacked in defending his pictures the cleverness which had originated them. It will be recalled that Ruskin had stigmatized him as "a painter flinging a pot of paint into the public's face," a preëminently Ruskinian critiscism, which Whistler foolishly resented. The consequence was that "symphonies in black and gold," and "nocturnes in blue and silver" were put upon the witness-stand, with the artist as their interpreter, to a Philistine jury. When the "London Bridge and Fireworks" was shown to this jury, some one asked which was the bridge, greatly to the artist's discomfiture and the audience's amusement. Now there was no cause for discomfiture nor for qualification on his part. Had the jury, the eminent defendant and the judge been actual spectators of the scene under similar circumstances, the identical question would have been to them quite as puzzling. The merit of the artist here consisted in the fact that he was able to translate into pigments effects which were in their nature too vague to be drawn.

The criticism applied to Whistler has been equally applied to all of the "Impressionists," and our own Inness was often open to it. People, whose highest ideal of art was reached in a Dutch painting of a cabbage leaf, laughed with infinite glee at Corôt, because he might paint a tree in full foliage, on which the closest scrutiny failed to find a leaf. Yet the same critic would calmly tell that he was walking in a lane at dusk, and saw something which was either a man or a cow—the difference between himself and the artist (I had almost said the cow) being that one could depict what he saw—the other could not.

When Turner first flung upon canvas the full chaotic strength of his wonderful palette, all the art world thought the graceful watercolorist was gone mad, and all the non-art world fled in horror. But at last it began to be seen that it was neither madness nor astigmatic myopia which had possessed the artist, but the true spirit of nature, revealing to him a deeper insight into her mysteries, while he, like some Delphic oracle, dared to tell what he saw. For the rest of men, their eyes were not unsealed to the presence of all these wonders. Even after Turner had worked his miracles on them, they were not yet whole, seeing "men only as trees walking," but they had been led toward sight, and could at least see enough to know that all sky was not blue, nor all grass green. With this new light, artists began an immediate return from misleading paths, and, with numerous stumblings in others scarcely less false, an eager search after a more truthful art.

In this search it was soon found that to all but ideally comprehensive minds two alternatives were presented, that the colors of nature must be studied and painted (with large sacrifice of defined form), or else form must take precedence of color. None but a man of vast mental grasp could paint both equally, and even with him it was questionable whether his attempting to do so was not at the cost of something in each.

A man like Corôt, bent upon transfixing on canvas the very tremulousness of leaves, and the hot palpitation of summer air, would inevitably fail if, at the same time, he made a careful anatomical study of each leaf and flower; while an artist such as our own William Richards, drawing every detail with most close and loving care, must in this study lose something of the wider sweep of effect and deeper glow of color.

Here was the point of separation clearly arrived at, not quite for the first time, for wanderers in the fields of art had unwittingly come to it before. Now, however, the point was plainly discerned, so that passing beyond it, the world was enriched by finding new fields for an old art, and the seeds of a new one. The new phase of an old art was, as we have seen, the introduction into painting of nature's innermost coloring, and of her less defined impressions—purples and grays of twilight, glow of dawn, halos of mist, and white iridescence of pure sunlight. The new art, whose birth is so recent that its voice is as yet inarticulate and almost unheard, is the art of pure color.

That men, daily thrilled by songs of birds and the musical thunder of the sea, should have so long waited for the art of music is strange, but how much more strange is it that those whose everyday life was so deeply affected, and whose emotions were so deeply stirred by all the manifestations of color, should have so long waited for the art of color. For not natural music, nor any of nature's voices have so deeply touched the fountains of the soul as her colors. What man has not in spirit knelt, almost a sun-worshipper, before the glowing panorama of sunset or sunrise? or gazed, unconscious of all the world, while gray, uprolling mist revealed the infinitely pure colors of newly showered trees and grass, or the heavenly blue of distant hills? In quieter mood, who has not, book on knee, dwelt in unformed reverie upon the slowly reddening glow and flickering shadows of his own grate fire? This instinctive love of color is fundamental, not ours alone, but like all instincts, shared by us in common with all animate creation.

Let us take a rapid survey of the processes of its development, since it will explain why it is so closely interwoven with the texture of human life.

In the Carboniferous age plants were flowerless, propagating by spores. These acrogenous plants were succeeded by those whose seed was inclosed in a scaly envelope, like the pine cone, but there were still no flowers, as we understand them, and cross-fertilization was carried on by accidental means, the pollen of one plant being transported to the stigma of another, mostly by the wind. This method was enormously wasteful, in that out of enormous quantities of pollen dust produced, very little was deposited at just the right spot for fructification. It came about, after a long time, that some of these flowerless gymnosperms, from one of several causes, developed about their seed-bearing cup a whorl of leaves different in color from the universal green of the plant. At once these cups became objects of especial attraction to insects who were in search of food, and these, penetrating the flower for sugar secreted at the time of flowering, received the pollen upon their bodies, which they at once took to another flower. By this simple phenomenon flowering plants received a start in the "struggle for existence," and soon enormously outranked those without flowers.

A precisely similar transition was meanwhile taking place in insects, reptiles, fish, etc., in whom the chance manifestation of color different from a class created an element of sexual attraction, which gave those especially colored an advantage over their uncolored mates. For it will be seen that while plants had been thus bidding for the patronage of insects, they had also been cultivating insect sensitiveness to color, associating it with needful supply of daily food.

Accidents of mimicry, utilized for purposes of defense and destruction, were also sources of specialized coloring, and the consequent advantage to animals so colored.

These modifications, which were thus taking place in flowers and insects, occurred also in fruit and birds, and were brought about in ways altogether similar. Thus we see that the recognition of color was, by the very necessities of existence, impressed upon all early life, which was followed in the order of development by other types, upon whom these impressions were again stamped, becoming at each stage deeper and more indelible.

The process was like an early geological deposit, which has sunk more and more deeply into the earth's surface, beneath deposits similar to itself, constantly changing its own character and becoming more wide-reaching and enduring. Beneath all shifting sands of fashion, all conglomerate of education, all sandstones of heredity, this instinct of color now spreads, crystallized by the struggle for existence into imperishable rock, wide as the earth.

There is no type of life among animals which does not manifest this color appreciation, as far as science has investigated, while among all races of people, living or dead, of whom we have any relic—Gladstone, Geiger and Dr. Magnus to the contrary notwithstanding—we find a love of color as keen as our own.

It was the very universality of this recognition which seems to have prevented its becoming an art. It was like the all-embracing air, which no one could circumscribe. Now, however, we see the first dawn of the new art. Now artists of ability are studying it in its new estate, and fixing it in their combinations of glass, mosaics or pigments, in which they often work more wisely than they know, and are helping to develop an art they do not recognize.

Arrangements of color, strange at first because so foreign to older art methods, are becoming familiar to us, who recognize their truth and beauty. What has been done is as yet nothing. The art is still unformed and its followers uncollected. Yet its processes of development can with some confidence be predicted, for we have as a guide the history of the sister art, music, between which and color exists a closer analogue than we can now fully discern.

When I speak of color I do not mean color applied to specific form. Such applications have within the limits of the art a legitimate function, yet one whose interest must be subordinate and secondary, rather suggestive of analogous arts than distinctive of itself. In sketching, therefore, the probable development of this new art, I shall briefly mention its effect upon painting as now recognized, upon stained glass and mosaics, upon decorative painting and frescoes. I shall then proceed to consider briefly a few of its physiological aspects, and its possibilities through the mediums of lenses and other optical instruments.

(*Completed in next number.*)

Lincrusta-Walton.

THIS new decorative material, which is so rapidly growing in popular favor, is displayed to such good advantage in the Exposition of Railroad Appliances, that a word in its favor is appropriate. Mr. J. J. McGrath, who controls its sale in the West, has fitted up a room in his establishment on Wabash avenue entirely with this elegant and durable decorative material. Mr. J. W. Root, the well known architect, says of it: "It is one of the most valuable decorative materials ever introduced, and its possibilities can hardly be overestimated, it being so subject to elegant combinations with other materials," etc.

THE favor with which this material was received upon its first production in England, has rapidly spread through the art centers of our own country, and given a new impetus to the growing demand for beautiful interiors. It is a fortunate circumstance for its suitable introduction in the West, that it is in the hands of so justly celebrated a decorator as J. J. McGrath.

At the Railway Exposition.

THE architects who have visited the Railway Exposition, now in successful progress, have undoubtedly found many novelties of great interest that touch the line of their profession as well as that of railroading. Coming, as they do, from distant cities and places, these new devices and improvements have without question served to introduce many new ideas, and afforded new additions to their repertoire of building supplies; since the gentlemen in charge, while not always the owners of the exhibits, without exception fully represent their respective houses in their courteousness and readiness to afford all the information necessary to give a comprehensive and intelligent understanding of the several appliances in their charge.

Among some of the objects of interest to architects and builders, and worthy of note, is the exhibit of the Glass Veneer Company, of Boston, near the southwest hall of the "annex," which is in charge of our fellow-townsmen, Messrs. Healy and Millet. These veneers or frescoes on glass present something unique and beautiful in the way of house decoration, as they are applicable to dadoes, ceilings, mantels, etc., while they may be as easily cleaned as a window, and withal are durable. These same gentlemen, in connection with this exhibit, make a fine display of stained-glass work of their own manufacture.

In the immediate vicinity of the foregoing exhibit is another remarkable "new departure" from old ideas, in a display of "rolling Venetian blinds," placed there by the inventor, J. G. Wilson, of New York, who has met with a wonderful and deserved success in their introduction by leading architects eastward and in Europe. These blinds serve the purpose of inside blinds or outside window shutters; made artistically of various hard woods and steel, they possess an adaptability so varied, and an elegance and beauty of finish, together with a simplicity of action—rolling up with a spring to the touch like magic—that stamps it the blind and shutter of the future, not only for dwellings, but stores, academies, halls, and other public places.

Another attractive spot which will call a halt to architects, painters, and house decorators, is the beautiful illustrated Pagoda in the "annex" of Messrs. Sherwin, Williams & Co., of Cleveland and Chicago, presenting a full display of their celebrated colors for coach, carhouse, sign, fresco and ornamental painting.

In the main building, at the north end, the Chicago Ventilating Company also presents an attraction with their exhibit of ventilating devices, comprising their Wing disc fan, Wing fan ventilator, outside or wall register, horizontal steam fan, etc.; practical and simple devices for removing heated and noxious air from premises and introducing fresh air *ad libitum*. Their special merit carries conviction without argument.

Another very full and artistic display of oil colors, varnishes, artists' materials, etc., in the center aisle of the building, is sure to interest, as it attracts general attention. It is a complete representation of the manufacture of Messrs. Coffin, Devoe & Co., of New York and Chicago, who have reached the pinnacle of fame among the artists and artisans of the country.

Still another novel and highly interesting display in the "annex," near the entrance, which no architect or builder can afford to pass by without investigation, is presided over by their agent showing a full line of the patent glass roofing and siding produced by the Lane & Woodworth Company, of Youngstown, Ohio. The merit claimed for this novelty, which is in green, amber, alabaster, orange, pink, blue, black, and in imitation of the different marbles, is, that no other material need be used for covering or siding buildings.

Among the wood-working machinery there is one machine which is certain to delight builders, especially as it seems to be as perfect as human ingenuity can possibly make anything. It is the hollow chisel car-mortising machine, entered by Messrs. Greenlee Bros. & Co., of this city, and makes a mortise of any desired depth, and, from the smallest sized chisel cut up to a mortise four inches wide, and with an ease and accuracy that is a marvel of exactness and finish. The machine is an entirely original process, and is suggestive of the many steps that have been taken toward excellence since the first attempt in 1826 to bore a square hole.

Where, perhaps, the architect will linger longest is at the exhibit made by Messrs. Keuffel & Esser, of New York, importers and manufacturers of drafting instruments and drawing materials. If there is anything the architect, engineer, or draughtsman may require in the line of their professions, and cannot find it in this magnificent display of perfected implements and material it would puzzle them to name the exigency that would require "the missing link." Messrs. K. & E. have been exceedingly fortunate in the locality secured for the presentation of their wares—the east passage to the "annex"—as it is where at least two-thirds of the visitors must come in contact with it.

There are other kindred "features" at this Exposition worthy as well of having special attention called to them, but undoubtedly they will not be overlooked, especially by those who are on the alert for knowledge that will enhance their utility.

CHARLES AND DENNIS HURD, of Buffalo, N. Y., are interested in a large steam mill that is being built at Detour. They own a large amount of timber in the neighborhood.

CHIEF ENGINEER BECKER, of the P. C. & St. L. railroad has closed a contract for an iron bridge 700 feet in length over the Big Miami river at Dayton, Ohio, to cost $56,000.

Special Correspondence.

ST. PAUL AND MINNEAPOLIS.

St. Paul, Minn., June 16, 1883.

Editor Inland Architect and Builder:

As my letter indicates, building in St. Paul and Minneapolis is exceedingly lively just now. Commodore Davidson of this city is building a new opera house on the corner of Wabasha and Fourth streets, the first story being nearly finished. The estimated expense is $200,000. He is also building a brick block of six stories, for stores and offices, on the corner of Cedar and Fourth streets, which is under the supervision of Mr. J. C. McCarthy, architect. Adjoining the new opera house is another building being erected of brick, which is also six stories, and which will be used principally for offices.

J. H. Pomeroy is erecting a five-story brick block on Fifth street between Sibley and Jackson streets, which is to be used for wholesale purposes. It will cost $25,000.

Mr. Eckles is putting up a brick building, on the corner of Sibley and Seventh streets, of two stories.

The St. Paul transfer building, situated on Ninth street between Robert and Minnesota streets, is completed. The building is a very pretty frame structure 50 by 100 feet and three stories high, including basement. It is used for transferring freight from depots to stores.

An addition to the *Pioneer-Press* building is being built of brick 50 by 100 feet and four stories high. Mr. George Wirth is the architect.

A block is under construction on Wabasha street, 75 feet and four stories high, which will be used for flats, and adjoining the same is another of brick, 50 feet, being three stories, making 125 feet, and an estimated expense of $60,000. Mr. Radcliff is the architect. Also for a building for Mr. Mitch, known as the Mitch block, on the corner of Seventh and Exchange streets. The building is 40 by 80 feet, built of brick, with stone trimmings, and three stories high. Cost, $18,000.

There is being made an improvement on the Merchants Hotel of about $20,000, which consists of a brick addition 52 by 120 feet.

N. W. Kittson is building a beautiful residence, as well as barn, on Summit avenue and Dayton street, Mr. A. M. Radcliff being the architect, the estimated expense of which is $125,000. The residence is three stories high by about 94 feet square, including the projections. The style is French Renaissance.

Mr. Radcliff is also building a frame residence for D. E. Little at Duluth, 32 by 60 feet, the estimated expense of which is $10,000.

The offices of the Northern Pacific Railroad are nearly completed. The building is situated on the corner of Fourth street and Broadway and is built of pressed brick with terra-cotta trimmings, with bronze metal and furnished throughout. It is approached by a broad winding stairway of slate and wrought iron. The whole building is surrounded by a granite wall fifteen feet from the building. The building is five stories in height and the dimensions about 90 by 100 feet. All the door trimmings and chandeliers are manufactured for them expressly and of special designs, everything down to the doorkeys having the monogram of the company. Mr. B. L. Gilbert, of New York, was the architect.

Mr. Esterley is putting up a frame double-house tenement, with all modern improvements, on the corner of Walnut street and Pleasant avenue. The estimated expense is $4,000.

Mr. Castner, architect, is building a brick hotel on St. Peter street, corner of Ninth, for Joseph Rouleau, the estimated expense being $10,000. It is three stories and basement, and 25 by 75; modern improvements. Also a double brick house for Edwin Warne, at the corner of Bluff and Grand streets, to cost about $5,000. It is three stories, brick. A double frame house for William Stockton, at the head of Robert street, the cost of which will be about $4,000. An addition three stories brick for J. K. Humphrey, on Robert street, between Third and Fourth streets, the cost of which will be $3,500. Mr. Castner is also making plans for a first class frame residence for Captain Bowen, which will be located on Virginia avenue on St. Anthony's Hill, the expense of which will be about $6,000. And planning a two-story frame building 20 by 42, for D. E. Talbert, at the corner of Cooper and Spruce streets, the cost of which will be $2,500.

The First National Bank is building a new structure on the northwest corner of Fourth and Jackson streets, which is to be three-stories and basement, practically four stories. The building is to be made of Kacota stone for the first eight feet or up to the water table, and above that of St. Louis pressed brick, with ordinary trimmings. Mr. Millard is the architect, and the estimated cost of the building is $125,000.

Another bank, on the southwest corner of Fifth and Jackson streets, known as the Watson and Rice bank, is about to be built, Mr. Bassford being the architect — $25,000.

The National German-American Bank are also contemplating building a new bank on the corner of Robert and Fourth streets. The ground is now being excavated.

PUBLIC BUILDINGS.

Specifications for providing material and labor for the construction of an engine-house for the city are being prepared by E. P. Bassford. It will be of brick, three-stories high and basement. It will cost $22,000.

Commissioners have been appointed and bonds issued by the city to the amount of $300,000, for the construction of a new court-house, which will be commenced as soon as the plans are adopted, on the site of the old court-house. Cost, $1,000,000.

There will be a special meeting held next week to pass the building ordinance, which contains, with its amendments, over one hundred and twenty sections; and for the appointment of a building inspector.

The High School building here is progressing nicely, the exterior being nearly completed. Mr. Buffington, who has removed to Minneapolis, is the architect. It is three stories high, finished with brick and red sandstone front. The cost is $75,000.

Mr. Bassford is the architect for a three-story and basement brick building for the Watermans Commission. It is 25 by 50 feet, and will cost $7,000.

The bridge which spans the Mississippi river here, between east and west St. Paul, is being repaired.

WEST ST. PAUL.

Bircher and McGrath are building a new brick block, 50 by 75 feet.

E. Langevin is building a brick block of two stories on Dakota avenue; dimensions, 40 by 60.

J. L. Holman is building a brick block, the foundation of which is being laid just opposite the last-named building, on the corner of Dakota avenue and Bridger street, which will contain two stores.

Chas. Fitzer is building a double frame tenement house, on McCarthy street, three stories high.

Adam Ran is building a stone residence on Decota avenue, two stories high, of stone, to be trimmed with granite.

Martin and Lienan are putting up seven dwellings on Robey street for tenement houses.

Wm. Lucas is also building a frame house of two stories on Susan street — $2,000.

Chas. Kent has just completed his residence on Susan street. It is a frame structure of two stories high, with basement, and cost $4,000.

A residence for Frank Wettinger, two stories high, is being built on Oakdale avenue.

Mr. F. B. Doran is building a $4,000 dwelling-house on Susan street.

MINNEAPOLIS.

The West hotel, which is situated on Fifth avenue and Hennepin avenue, is built of Ohio sandstone with white trimmings. Its dimensions are 100 by 125 feet, and is about six stories high. This hotel, which has been spoken of frequently in these letters, is destined to be one of the finest in the West, and will fill the pressing need in Minneapolis for a good and commodious hotel. Mr. Buffington is the architect.

Westminster church is completed, and is said to be the finest church in the State of Minnesota, or west of Chicago.

The houses built in Baker & Stone's addition, called Oakville Park, are growing up like magic, and this suburb will soon contain a large population.

A new postoffice by the government architect is contemplated. The outside dimensions are 120 by 100 feet, the main office being 113 feet long, and two entrances. Judging from the plans, it will be ornamented with pressed brick and stone trimming, and is to be three stories high.

H. E. N.

CENTRAL
BAPTIST
CHURCH

CHICAGO. ILL



GROUND PLAN



GALLERY PLAN

CINCINNATI.

Cincinnati, June 14, 1883.

Editor of the Inland Architect and Builder:

The activity of the building trade, so auspiciously opened this season, continues, and appears to be increasing. Thus far, fortunately, there have been no embarrassments in regard to labor, and work of all kinds has gone on unretarded. While there are not so many large business houses in course of construction as last year, much of last year's work has been completed. Among the latter may be mentioned the tobacco warehouse of Brooks, Waterfield & Co., which is said to be the largest in the country. Two seven-story buildings are in course of construction; one, the Lombardy, commenced last year, was completed this spring, and the Stribley shoe factory, on East Fourth street, formerly a five-story, has been heightened to seven. A large addition, occupying the whole of Harriet street between Richmond and Court, five stories in height, is being added to the Eckstein white lead works, which it is claimed will render it the largest factory of the kind in the United States. One and a half million of building brick are being used in the extension, and 75,000 of fine brick.

At the Emery building, on the old St. Paul church site on Fourth street above Walnut, intended for the new Safe Deposit Company, the foundation is nearly completed, and electric light apparatus is being fixed to permit work night and day. It will be a seven-story structure, with pressed brick front and stone facings. The tendency of business building in Cincinnati is toward a greater use of pressed brick and an increase in height.

A greater number of building permits were taken out during the past month than during the month preceding, and they indicate increased value. It is to be regretted, however, that building permits are not required in Cincinnati except for occupancy of the street by building material, and that accurate estimates of the cost of the structure to be erected are not required in taking out the permit. That feature, therefore, has become a mere useless formality, and the permits really indicate nothing of the cost of the structure, those reported are consequently very often given at random. As an instance, a building erected a year or two ago at a cost of over $150,000, was reported on the permits at $30,000, and another reported at $15,000 actually cost four or five times that sum.

The Cincinnati Northern Narrow Gauge has developed a fine territory within the past year or two, which is being eagerly sought and rapidly built upon. East Norwood and Ivanhoe have grown up within the last year. The former, located at the crossing of the Northern and the Cincinnati, Washington & Baltimore, is the property of Mr. L. C. Hopkins. Many select private transactions of real estate have been made, and during the season about thirty-five good-sized dwelling-houses built, at a cost ranging from $2,600 to $5,500. New buildings mark the entire line of that road to the city, and the promise for next year appears to be still better.

On Walnut Hills and Corryville there have been many improvement of a substantial and elegant character, and many are still in progress.

In the city proper the Adams Express Company is about to erect a large three-story brick stable at the northeast corner of Seventh and Broadway, at a cost of $35,000.

The old St. John's church, corner of Seventh and Plum, now owned by the congregation of St. Paul's, will be enlarged this month and its towers completed.

The Goff estate is erecting a four-story stone front business block at the corner of Plum and Perry streets.

The new Cincinnati gas works in the East End will be among the most extensive in the United States. They will cover about ten acres. Some change has been made in the plans by which the foundation will be raised so as to keep the works above flood-mark of the Ohio river. Messrs. J. M. Blair & Son have the contract for supplying the brick and doing the brickwork, the requirement for which will be 2,000,000 brick.

On Wednesday, June 6, on invitation of Messrs. J. M. Blair & Son, members of the Builders' Exchange, including Mr. J. J. Pearce, its secretary, and Mr. J. F. Blackburn, secretary of the Board of Trade, took an excursion up the Ohio river on the steamer *Bonanza* to Blairsville and New Richmond (Clermont county) points, respectively twenty-five and twenty-eight miles east of Cincinnati, for the purpose of inspecting the brickworks of the firm inviting them. The works are very extensive, covering about thirty-five acres, and are supplied with all the latest steam and machine methods of crushing clay, elevating it by inclined plane, and drying by steam, and their own patent palates or shelves. The sheds cover about two acres, and are adapted for winter work, which was very successfully performed last winter. The works last year put out about one-sixth of the 90,000,000 brick used in Cincinnati. Of late years the brickyards of Cincinnati have been reduced considerably in number, and have reduced their product, the property occupied by them being more valuable for building purposes. Those removing have selected localities convenient by rail for shipment to the city and elsewhere, and find a purer quality of clay.

The Builders' Exchange this year has been more successful and popular than at any other period in its history. It draws a larger attendance every day, and probably treble the amount of business is transacted at the rooms than at any time previous. This is due in great measure to the efficiency and enterprise of its accommodating secretary, Mr. Pearce. The membership is nearly double that of last year.

The art department of the Cincinnati Exposition is making special efforts this year to secure a good display of architectural designs from architects throughout the country. This feature has been neglected heretofore, and will prove of interest not only to architects and builders but to property owners as well. Chicago architects are cordially invited to send in some of their specimen drawings.

XXI.

ST. LOUIS.

St. Louis, Mo., June 9, 1883.

Editor Inland Architect and Builder:

The architects here are all so busily engaged in the competition on the proposed Exposition that it is almost impossible to get any of them to furnish us information regarding other work, which is almost entirely suspended. In fact, they seem to be about crazy on the subject and hardly talk or think of anything else. It has been rumored that a certain Boston, Mass., firm stands a good chance in the competition, and some people here seem very indignant at the suggestion, as it would leave a great many St. Louis architects short about $500, which is about the cost of each set of drawings. Private offices are locked and no one is permitted to get even a glimpse at any of the drawings. A great many are doing the work at home evenings, thereby taking no chances of anyone copying the plans. The date set for inspection of the plans is some time in July.

I have heard of but one firm of Chicago architects who are engaged in the work—Messrs. Burnham & Root.

The following article from the St. Louis *Republican* of the 9th inst., will give your readers an idea how the cases which the architects have been vigorously fighting for some time past, stand at present:

"Thirty-eight cases against as many architects for carrying on business without a license were disposed of yesterday in the first district police court. The cases have been on the docket for some time, and it was agreed by the attorney for the defendants and the city that one case should be disposed of and that the rest should abide by the result.

"The case of John W. Herthel was then called. The information charged him with carrying on the business of an architect without a license. A deputy collector placed on the stand swore that the defendant paid no license, which the defense conceded, and the city attorney then offered the ordinance in regard to the matter, which was placed in evidence. No defense was offered. It is the intention of the architects to appeal the case and test the constitutionality of the ordinance. A number of hotel-keepers, charged with carrying on a business without a license, had their cases disposed of, and, on the evidence, the judge ordered a fine of $100 and costs.

"Continuances generally were ordered in the cases of Wm. Beattie, J. H. McNamara, Geo. W. Pipe, James Stewart, James McGrath, Charles K. Ramsey, E. C. Jansen, Edward Jungenfeld, Frank A. Renick, Patrick F. Meagher, Otto P. Koenig, A. J. Wilhelmy, Alfred Grabble, Henry G. Isaacs, J. B. Legg, Wm. H. Kirchner, Wm. C. Sheer, Thomas Walsh, Chas. F. May, Thos. W. Brady, Edward Mortimer, John G. Cairns, Jos. W. Givens, Chas. B. Clark, Charles E. Illsley, George I. Barnett, Isaac S. Taylor, Thos. J. Furlong, F. D. Lee, John F. Mitchel, Wm. F. Roeder, August Bennicke, Thos. B. Amnan and A. Druiding."

A large portion of them favored the $50 license plan at first and allowed the law to pass without the least interference. But when it had become a fixed law they at once saw their mistake and made up a fund with which to employ an attorney to defend the cases the city had brought against them.

If my information is reliable, none of them have paid the license nor will they, unless forced to do so.

NOTES.

Building is rather slack just at present.

A small number of building permits were issued last week, ranging from $300 to $3,000.

On the 8th permits were issued to the amount of $10,000.

Business has been generally good this spring, and architects have no reason to complain of the dull season they are having just now.

Messrs. James Stewart & Co. exhibit plans of a handsome structure 73 by 109 feet, two-stories high, with stock brick front, red joints and stone trimmings, designed for works, office, sales-room, etc., of the R. L. Rosebrough Sons' monumental marble works, to cost about $12,000, located corner of Twentieth and Olive streets. Messrs. Stewart & Co. are also doing considerable work outside of the city.

One of the most notable buildings erected during the spring is the "Lucia" building, corner of Seventh street and Christie avenue, E. Jungenfeld, architect, which has just been completed. It is six stories high, English Gothic style, built of stock brick with terra-cotta trimmings and cost $80,000.

Mr. Jungenfeld is also at work on several large beer depots, one at Kansas City, Mo., 130 feet front; one at Little Rock, Ark., 130 feet front; one at Omaha, Neb., 66 by 120 feet; also an office here, 39 by 54, for the Anheuser-Busch Brewing Association.

Mr. James McGrath has plans for a fine business block, 120 by 109, situated corner of Ninth and Olive streets, for J. D. Lucas. It will cost about $100,000. Also two dwellings for J. Fruin, to cost about $8,000 each; a schoolhouse at Neosha, Mo., to cost about $25,000, and a courthouse at Huntsville, Mo., to cost $25,000.

There have been a great many flats put up here this season.

F.

KANSAS CITY.

KANSAS CITY, Mo., June 12, 1883.

Editor of the Inland Architect and Builder:

As a matter of fact, it cannot be said that at this time our building boom is anything like we had every reason to expect; although a goodly number of buildings are under construction — others projected — which may, before the season shall close, "materialize" to such an extent that will exceed the expectations of the most sanguine. There are store buildings being constructed and many projected, also a few first-class residences and churches. The Kansas City Fair Association have also made preparations to erect suitable buildings upon their new grounds, to be finished in time for their Exposition in September next. The United States Postoffice and Custom House is now progressing finely under the superintendence of H. C. Chace. There is now on the outskirts of the city, in the course of erection, numerous small dwellings, and some of considerable pretensions, in the way of architectural design, which are being done by the inevitable "architect and builder." The cyclone that passed through the city about one month ago did considerable damage to buildings and other property. A great many buildings were entirely demolished, others so much damaged that they have since been pulled down, and many rebuilt or in the course of reconstruction. This catastrophe has caused much temporary activity among the various building trades. The rainy weather of the past six weeks has retarded building operations materially, especially in the foundations and brickwork. A great demand for dwellings of a medium class still exists, although a great number have just been completed and many others are in the course of erection. All are rented and occupied as soon as finished, and often before they are finished, and at a good rental; and still the cry is for more. The commercial interests of this city have in the past four years fully quadrupled; consequently the demand for storehouses has been great. Many have been built and all occupied as soon as completed.

C.

A NEW tile has just been imported from Fernsicht, in Schleswig Holstein, North Germany, which is claimed to be the best material in the market for the lighting of walls, the wainscoting of bathrooms, hospitals, etc. It is a dead white, and is enameled; also, different colors in raised figures are shown. It is also made in ornamental designs for mantels, etc. It is thick, and will serve as a fireproof wall. True, Brunkhorst & Co., the Northwestern Terra-Cotta Works, are the importers. A similar material is about to be manufactured by them.

Our Illustrations.

Page 65, Court-House, La Salle county, Illinois, at Ottawa, by M. L. Beers, architect, Chicago. The building is 175 by 86 feet, three stories and basement in height. The walls are constructed of cut stone, rock faced. The interior is substantially constructed, iron beams and columns being used, and thoroughly fireproofed. The building is heated by steam, which is conducted one thousand feet through a pipe placed from two to three feet underground. The pipe (six-inch) is packed with mineral wool in a box sixteen inches square, and the loss by radiation in the transition is only three pounds. Baker, Smith & Co., of Chicago and New York, placed this work. The building was finished the past fall, and cost about $150,000.

Page 69, Church for the Central Baptist Society, Chicago, John C. Cochrane, architect. This building will be located on North Halsted and Belden avenue, will be of pressed brick with terra cotta ornamentation. The rear will be divided in two stories, containing the usual church lecture-rooms, etc. The pulpit is in the corner of the auditorium, diagonally across from the entrance. It will be heated by steam, and contain all the best features known to church architecture. The building will cover 75 by 100 feet, and will cost, without gallery or furniture about $25,000.

A New Decorative Glass.

The attention of those interested in decoration by means of glass has of late been called to a new ornamental glass which is now being manufactured upon a large scale at South Boston. The company recently had upon exhibition at the Palmer House in Chicago a variety of this new decorative material which was really a revelation in glass manipulation. The forms exhibited were principally bowls, vases, etc., but the variety of shades, colors and shapes were beyond description. The company claims to be able to manufacture it in any form, and if so, it will be a valuable addition to the now common varieties of stained, opalescent and jeweled glass, as it contains all the brilliancy of color and clearness of either. The samples shown resemble the glass vases found in the ruins of ancient Persian cities or those of Florence, and is perhaps also akin to the Venetian art of glass-making. Be it a revival of a lost art or the discovery of a modern mind, it is certainly valuable and should receive the attention of glass artists and decorators universally.

Prices of Labor and Material.

The prices paid for building labor and material in Chicago, St. Louis and Cincinnati are as follows:

LABOR.

Bricklayers.—Chicago, $4 to $5.50; St. Louis, $4.50 to $5; Cincinnati, $4.50.
Stonemasons—Chicago, $3.50; St. Louis, $3; Cincinnati, $3.50.
Stonecutters—Chicago, $4; St. Louis, $3.50; Cincinatti, $3.50.
Stonecarvers—Chicago, $4.50 to $5; St. Louis, piece; Cincinnati, $5 to $5.50.
Plasterers—Chicago, $4.50; St. Louis, $4 to $4.25; Cincinnati, $3.
Carpenters—Chicago, $2.75 to $3.50; St. Louis, $3; Cincinnati, $3.
Stair-builders—Chicago, $3.25 to $3.75; St. Louis, $3; Cincinnati, $2.75.
Painters—Chicago, $3; St. Louis, $2.75; Cincinnati, $2.50.
Tin-Roofers—Chicago, $2.75; St. Louis, $2.75; Cincinnati, $3.
Slaters—Chicago, $2.75 to $3; St. Louis, $3.50; Cincinatti, $3.50.
Laborers—Chicago, $1.50 to $1.75; St. Louis, $1.50 to $3.50; Cincinatti, $1.50.

MATERIAL.

Brick (common)—Chicago, $7.50 to $8; St. Louis, $18; Cincinnati, $18. Pressed—Chicago: Indiana, $16 to $28; Anderson pressed, $30 to $40; ornamental, $100 to $300; enameled, $100 to $125. St. Louis, $40; Trenton, N.J., $46; Baltimore, $55; Milwaukee, $26; Philadelphia, $48; enameled English, $130 to $200.

Stone—Chicago: Blue Bedford 65 cents (square foot); Lamont, 50 cents; Joliet, 50 cents; sandstone, $1.50; Greenstone, 85 cents; Dimension, 25 cents; Rubel, $8 per cord. St. Louis: Warren stone, "blue," 85 cents; "white," 75 cents; Rubel, $1.65 to $1.90 per perch.

Cement—Chicago: Portland, $3.25 to $3.50; Utica, $140; Milwaukee, $1.40; Louisville, $1.50,

Lime—Chicago, 75 cents to $1 per barrel; St. Louis, "Glencoe," 30 cents per bushel.

Sand—Chicago, $1 to $1.25 per load; St. Louis, $2.75 per cubic yard.

Plastering Hair—Chicago, 35 cents to 40 cents per bushel; St. Louis, 35 cents.

Plaster of Paris—Chicago, $2 per barrel; St. Louis, $2.25.

Nails—Chicago, $3.50 to $6.35; St. Louis, to $6.75.

Lumber—Chicago: boards, $37.50 to $47.50; framing timber, $12 to $20; shingles, $2.90 to $3.10; lath, $2.60. St. Louis: Lumber a little higher than the Chicago market.

Plastering at St. Louis, for three-coat work, 30 cents per yard; laid off work, 28 cents per yard; all frame work, 35 cents per yard; laid off frame work, 33 cents; cornice, superficial work, 28 cents; gray finishing 2 cents extra per yard on above prices. Plasterers are obliged to pay the city ½ cent per yard for all water used.

In answer to a correspondent in Iowa we will quote the following prices paid for piece-work in Chicago at present. The figures are given by a prominent builder and are intended to cover common work on frame buildings and for labor only: Rough framing for houses, barns and country buildings generally, $10 per thousand; laying floor, 40 cents per square, or 100 feet; sheeting, dressed one side, 60 cents per square, or 100 feet; siding, six inches wide, $1 per square, or 100 feet; roofing, common boards, 75 cents per square; setting and casing ordinary windows and doors, $2.75; for putting down 8-inch base about 4 cents per foot; casing, hanging and trimming inside doors, $4. Of course, this is an estimate upon common work, as all piece-work is apt to vary according to its elaboration or plainness.

A SCHOOL of carpentry has been connected with the Clark university, Atlanta, Ga.

BUILDING permits and frequent transfers of real estate show that Nashville, Tenn., has a boom.

Architectural and Building Notes.

Architect B. W. S. Clark has planned a $20,000 pressed brick block at Aberdeen and Jackson streets, also a $5,000 brick building on Western avenue, for George N. Lathrop; also a $5,000 frame house at Grand Crossing for J. F. Dunne.

The E. Stebbins Manufacturing Company, Springfield, Mass., sole manufacturers of Broughton's patent self-closing work and of Stebbins and Brightwood compression and ground key work, are enjoying a large trade in their standard manufactures.

The sanitary arrangements of the Howland block are being overhauled by Thomas Kelley & Bros., and the closets taken out and replaced by nine of the "National" make, imported from England. They are made by Thomas Tyford at Hanley, England, and are fast becoming a favorite this side of the water.

Architect O. J. Pierce is erecting three two-story houses on Thirtieth street, near Vernon avenue, for D. W. Jackson; one two-story frame house in Englewood, for D. W. Chase; a stable in Oconomowoc, Wis., for H. S. Peck, and a livery stable for Andrews & Meserver, on Lincoln avenue.

Architect Gregory Vigeant has completed plans for a church for the Presbyterian society of Valparaiso, Ind., to be built of pressed brick with stone trimmings, and to cost $15,000. The same architect has also prepared plans for a new Catholic church at the same place, to cost $30,000.

A seven-story apartment house is being built by the Stellman estate on Euclid avenue in Cleveland. All the ceilings will be made fire-proof by hollow tile arches between the iron beams, and also the partitions, furrings, etc., will be of this material. The Ottawa Tile Company are contractors for this work.

Architect Cass Chapman has planned for Thomas Hoyne a five-story business building of Anderson pressed brick, 30 by 100 feet, on Michigan avenue, north of Randolph street. Mr. Chapman has also planned stores at the corner of Thirty-fourth and Halsted streets, corner of Robey and West Indiana streets, at Wicker Park, and at 682 and 684 West Indiana street.

Architect John Otter is building a residence for C. O. Bergquist on Noble avenue, in Lake View, to cost $2,000; a factory for O. J. Nilson on Pearson street, near Wells, 70 by 100 feet, to cost $20,000; a shop and dwelling for A. P. Shongren on Larrabee street, near Oak, 47 by 100 feet, to cost $8,000; a four-story dwelling for F. Bush on Sedgwick street, near Hill, to cost $12,000.

Architect L. G. Hallberg has planned a neat residence on School street, Lake View, for John Enauder; also a brick dwelling, Lemont stone basement, on Thirty-ninth street, near Lake avenue, for J. M. Griest,; also a $25,000 improvement on La Salle avenue, near Eugenie, the material to be green stone, and the most notable feature a large central hall, with apartments radiating from it.

Architect Pierce has the following plans completed: One for two dwellings, two-story stone fronts on Vernon avenue, near Thirtieth street, for D. W. Jackson; five three-story and basement dwellings on Chestnut street, near Chicago avenue; one three-story and basement house on Cass street, one three-story and basement dwelling on Rush street, and two-story brick flats on Henry street.

Architect H. M. Hansen has planned a two-story and cellar flat house on Mohawk street, near Garfield avenue, for John W. Kent, to cost $5,000; also a photograph gallery of Anderson pressed brick on Chicago avenue, west of Moody's church, for W. L. Felt, to cost $8,500; also a three-story apartment house of brick, with stone trimmings, on East Indiana, near Rush, for Mrs. J. Hampsen, to cost $7,500. No contract has been let for any of these houses.

Architect Julius Huber has completed plans for a three-story and basement brick building on Carr street to cost $5,000; for another on Rush street to cost $6,000, the trimmings being stone; for another on Chestnut, or rather a block, the expense to be $20,000; for D. H. Chase's house at Englewood, a frame, and to cost $4,000; also a barn, nearly completed, in Lake View, for O. J. Pierce; another, with stone front, on Vernon avenue, near Thirtieth street, for D. W. Jackson; cost, $12,000.

Cook county has just completed an infirmary at Jefferson at a cost of $150,000. There were 4,000,000 brick and 1,250,000 feet of lumber used in the construction. Messrs. McGraw & Downey, of Chicago, received the contract for the construction late in the summer, but finished the brick work before cold weather set in, and it is interesting to note, and exceedingly creditable to these contractors, that the entire contract was filled without a single charge for "extras." John C. Cochrane, of Chicago, was the architect.

U. P. Smith expects to build ninety houses the coming summer in the neighborhood of Thirty-third street. One feature of their construction will be the application of the Dudley blind and shutter worker. This appliance since its first introduction among builders has grown in favor, and its simplicity of construction recommends it as a valuable appliance to shutters aside from its most desirable feature of convenience. The names of many of our leading architects and real estate men are mentioned among those who have seen, used and indorsed this appliance.

The Chicago Anderson Pressed Brick Company met with a severe and disastrous loss by fire on May 13. The entire building, covering 200 by 260 feet, was consumed. About 3,000,000 pressed and ornamental brick were in stock in the yard and but slightly damaged. The company, as soon as the insurance was adjusted, commenced to rebuild and are pushing the work in every possible way. The new building will be 200 by 500 feet. They hope to be running again in about two weeks. Their large supply of brick fortunately helps them to fill immediate orders, and no delays will probably now occur in supplying their excellent building material.

Architect Hallberg is building a residence for George P. Braun on La Salle avenue, near North avenue. It is 25 by 55; the walls are of green stone, ornamented by granite columns, and trimmed with terra-cotta. It will be completed in the fall, costing $15,000. Also two houses on West Monroe street, near Western avenue, for Dr. Thurman W. Brothy. They are 36 by 74, the basements of green stone, with walls of Chicago Anderson pressed brick. Cost, $8,000.

Mr. Hallberg also reports a two-story flat on Diversy street, near Clark, for A. F. Lilza, costing $4,000, and a residence on Lake avenue, near Fortieth street, three-story and basement, for J. H. Conrad. The basement is blue Bedford limestone and the walls Indiana pressed brick. It is 25 by 65, and will cost $12,000.

An inspection of the Hammond library, now being plastered, displays the perfection to which the art of fire-proofing has been carried. Every part of the structure is either of brick, hollow tile or porous terra-cotta. The partitions are of brick or of hollow tile. The baseboards are of porous terra-cotta. The iron columns, ceilings, etc., are covered with it, and even the iron trusses in the roof are covered with fire-proof material, while the spaces between the iron beams, girders, etc., of floor or roof is filled in with hollow tile flat arches. Mr. P. B. Wight, whose work it is, could hardly construct a more complete sample of fire-proofing than this, and it would be well if every builder in the country could see the interior of the Hammond library on Ashland avenue before the plasterer covers this superb fire-proof system from view.

The highest building yet planned and ordered constructed in Chicago is that to be erected west of Fifth avenue and running through from and facing upon Quincy and Jackson streets, for the Royal Insurance Company of Liverpool, England. The frontage is 100 feet and the depth 165 feet. The altitude will be about 145 feet and twelve stories. W. W. Boyington is the architect. There were eight competitors for the plans by leading Chicago architects and the plans were sent to England for approval. The fact that the award was made in England, after a week's inspection, by a prominent English architect, makes a fair and impartial selection a foregone conclusion, and doubly creditable to the successful architect. The fronts will be of stone, with perhaps a moderate use of brick in the upper stories of the Jackson street front. The cost when completed will be in the neighborhood of $500,000.

Silbee & Kent, architects, have prepared plans for B. F. Norris for two three-story flats, one to be built on Oak street and the other on Ogden avenue. They are to be pressed brick, with brown stone and terra-cotta finish, Moorish style of architecture, and costing $16,000. This firm have also furnished plans to J. V. Weare for a house on Illinois street, to be three-story and basement, of pressed brick, and costing $7,000; L. Z. Litter, Geneva Lake, Potter Lodge, English half-timber style; cost, $3,000.

Three houses are just completed by this firm which are striking in their architectural features. They are numbered 400, 402 and 404 North State street, and are built for L. C. Pardee, J. W. Hobson and J. J. Luther, respectively. The general style is Queen Anne; the fronts are of brick, and each of a distinctive variety of the Queen Anne style. They are finished and open for inspection. The total cost is $35,000.

Personal Gossip.

Thomas Hardy, the novelist, was an architect until the success of his writing diverted his career. Many of his heroes are architects.

Frank J. Reid, Esq., correspondent and special representative of The Inland Architect and Builder, sailed the 9th inst. by *The Egypt* of the National line for a tour of the British isles.

Mr. J. H. Hall, vice-president of the Perth Amboy Terra Cotta Works, was in the city on the 9th. His company have been awarded the contract for the terra cotta upon the new Commercial Bank building

Mr. Joseph Twyman, the well known decorator in charge of the decorating department of J. J. McGrath, sailed for Europe on the 9th. Mr. Twyman takes his family with him, and will be absent for several months.

Mr. Francis Le Baron, the well-known decorator, is the Chicago agent for the Faienceries de Gren tile, made in the department of the Loire, near Paris. This tile has been recently introduced in this country and is largely used in the East. The agent for the United States is L. Contanseau, of New York. Mr. Le Baron is also the agent for the Fernsecht tile. His office is at 20 McCormick Block.

Many of the prominent engineers and architects in the West received an unusual and greatly appreciated courtesy from Mr. T. L. Johnson, the representative of the New York drawing material house, Messrs. Keuffel & Esser, at the Railway Exposition; this was the receipt of a beautifully arranged and printed invitation to attend the Exposition, with tickets of admission enclosed. The gentlemanly manager of Keuffel & Esser's beautiful exhibit is certainly deserving of much credit for his business foresight and courtesy.

Chicago Building Permits.

The following permits for buildings to cost $2,000 and over have been issued since the 18th of May:

D. Lane, two-story dwelling, 22 by 70, 402 Jackson street.....$ 5,000
Peter Debald, two-story store and dwelling, 21 by 48, 319 Hudson street.. 2,500
James Dunn, one-story market building, 80 by 150, Clinton and Jackson streets..... 9,000
Board of Education, three-story school, 87 by 102, Ashland avenue and Cornelia street..... 42,000
Jaeob Rozenberg, three-story dwelling, 87 by 77, Groveland Park and Twenty-eighth street..... 27,000
Chas. Langman, one-story shop, 25 by 58, 446 Fourteenth street..... 3,000
D. H. Small, two-story dwelling, 20 by 40, 114 Millard street..... 2,500
E. H. Eilers, three-story store and dwelling, 25 by 40, 274 Twelfth street. 4,000
Wm. Hartney, two-story eottage, 706 Hinman street..... 2,500
Joseph Ziechek, two-story dwelling, 21 by 46, 552 Twentieth street..... 2,500
Wm. Buesman, two-story dwelling, 21 by 40, 303 Henry street..... 3,400
John Cummings, basement and rear addition, 20 by 46, 17 O'Brien street 2,000
G. Sandt, basement and rear addition, 20 by 60, 14 O'Brien street..... 2,500
John W. Smyth, four-story store and theatre, 80 by 100, 150 to 156 Madison street..... 50,000
Lambert Tree & Geo. W. High, five-story store, 80 by 111, southeast corner Lake and LaSalle streets..... 60,000
C. J. Hull, four-story dwelling, 63 by 73, Park and Ashland avenues..... 18,000
C. J. Hull, three-story dwelling, 100 by 50, 31 South Ashland avenue.... 18,000
M. A. Normann, basement and frout addition, 28 by 57, 115 Evergreen street..... 2,000
F. Zeag, change roof of building to flat roof, 362 State street..... 3,000
Campbell Bros., six two-story dwellings, 125 by 36, 412 to 422 Leavitt street..... 18,000
John Reddy, two-story dwelling, 22 by 50, 3457 Dearborn street..... 4,000
J. N. Clark, two-story front addition, 22 by 32, 895 Fulton street..... 2,000
John Fraser, two-story dwelling, 21 by 46, 9 Plum street..... 2,200
Matt. Farley, one-and-a-half-story eottage, 20 by 43, 302 Henry street..... 3,500
H. Harpe, two one-story dwellings, 20 by 30 eaeh, Elk grove, near North street..... 2,000
John Lauritzen, two-story dwelling, 20 by 50, 3539 Dearborn street 4,000
W. Ruektamel, three-story dwelling, 22 by 60, 178 Rumsey street..... 3,000
Wm. Dressler, three-story dwelling, 22 by 50, 3516 Wentworth avenue... 3,500
Busse & Brown, two two-story dwellings, 44 by 50, 353 and 355 Marshfield avenue..... 5,000
J. C. McCullon, six-story warehouse, 50 by 80, 238 and 240 Market street . 30,000
M. Horrigan, two two-story dwellings, 22 by 46, 149 and 151 Paulina street 5,400
Peter Becken, three-story dwelling and store, 26 by 80, 475 South Halsted street..... 7,000
J. MeLaren, two-story dwelling, 40 by 60, 339 and 341 Ashland avenue.. 10,000
F. Popp, two-story dwelling, 30 by 46, 99 Kossuth street..... 2,000
M. Muller, two-story dwelling, 21 by 48, 94 Evergreen street..... 2,000
John Krajace, two-story flats, 22 by 56, 738 Allport avenue 3,000
K. Eichengrun, two two-story dwellings, 48 by 64, 736 to 740 Congress street..... 10,000
Campbell Bros., six two-story dwellings, 120 by 36, 382 to 392 Leavitt street..... 2,500
M. Young, two-story dwelling, 30 by 42, Harvard, near Water street..... 2,600
David Cary, three-story store and flats, 70 by 166, Northwest Wabash avenue and Eighteenth street 40,000
John Fitzgibbon, two-story store and dwelling, 25 by 70, 72 Elston avenue..... 4,000
Job Webb, three two-story flats, 61 by 40, 310 to 314 South Leavitt street. 10,000
J. Cohen, three three-story dwellings, 70 by 60, 46 to 50 Wiseonsin street . 25,000
Jaeob Roeder, two-story dwelling, 22 by 56, 394 Webster avenue..... 5,000
N. Larson, two-story dwelling, 22 by 45, 97 Carter street..... 3,500
Geo. Hewitt, two-story flats, 20 by 51, 59 Warren avenue..... 4,700
H. J. Berry, three-story factory, 44 by 80, Indiana near Market street.... 10,000
L. Rurckewsky, two-story dwelling, 21 by 46, 173 Dayton street 3,060
Aug. Kisehoff, two-story dwelliug, 21 by 65, 709 Halsted street..... 4,000
M. Dunn, two-story dwelling, 22 by 49, 298 Loomis street..... 3,300
Chas. Maxou, two-story dwelling, 21 by 63, 1156 Centre avenue..... 3,500
L. S. Anderson, two-story dwelling, 21 by 49, 94 Lineoln avenue..... 3,400
Allan B. Wrisley, five-story factory, 50 by 104, 479 to 418 Fifth avenue... 15,000
R. Freeman, five two-story dwellings, 100 by 46, 2900 to 2908 Vernon avenue..... 12,500
R. Rahn, two-story dwelling, 21 by 48, 3830 Dearborn street 3,000
John Rawle, two-story dwelling, 21 by 52, 3630 Dearborn street 4,000
M. Felton, three-story store and flats, 24 by 100, 490 Milwaukee avenue.. 9,000
H. Muskee, two-story store and dwelling, 22 by 45, 475 West Twelfth street..... 4,000
J. C. Waltz, three-story flats, 45 by 57, 379 Chestnut street 12,000
E. Fabian, four two-story dwellings, 66 by 50, 550 eubie feet, eor. Chestnut and Wells street..... 15,000
A. C. Lanston, three-story store and flats, 50 by 80, Milwaukee near North avenue..... 12,000
John Livingston, three-story store and dwelling, 25 by 60, Milwaukee avenue near Wood street 6,000
E. W. Tabor, two-story barn, 25 by 45, 2734 Prairie avenue..... 3,000
Peter Mohler, two-story flats, 46 by 54, 897 and 899 South Ashland avenue 8,000
Commercial Safety Co., five-story office building, corner Dearborn and Monroe street 200,000
Dr. S. Sawyer, three-story store and flats, 66 by 68, 193 to 197 North avenue 16,000
J. G. Hathway, shed, 280 by 160, Kingsbury and Indiana streets..... 10,000
E. W. Morrison, three-story flats, 56 by 75, 12 and 14 Elizabeth street..... 18,000
Wm. Budwiek, two story flats, 21 by 46, 696 Holt avenue..... 3,000
David Bain, three-story store and flats, 40 by 70, 631 and 633 Madison street 15,000
Thos. Sutton, two-story dwelling, 25 by 60, 234 Leavitt street..... 5,500
Wm. J. Heeber, two-story store and flats, 22 by 55, Cottage Grove avenue 5,200
John Holbert, two one-story eottages, 20 by 32 eaeh, 719 and 721 Dana street..... 2,000
George Weiss, six-story malt house and elevator, 110 by 100, Bloomingdale avenue and C. & N. W. R.R 100,000
Sehwartz & Kries, four two-story flats, 88 by 64, 2942 to 2948 Groveland Park avenue 20,000
Wm. Holee, two-story dwelling, 22 by 45, 2821 South Park avenue..... 3,000
M. Holee, two-story dwelling, 21 by 60, 830 South Ashland avenue..... 2,500
F. Chasal, two-story dwelling, 20 by 50, 526 Allport street..... 3,000
Geo. V. Hankins, three-story flats, 21 by 71, 184 Cass street..... 14,000
L. H. Lass, two-story dwelling, 22 by 71, 847 West Monroe street..... 9,000
Wm. Fleming, four two-story dwellings, 25 by 70 eaeh, 178 South Morgan street..... 20,000
Kummer & Corless, two two-story dwellings, 25 by 60, 343 and 345 Ashland avenue 11,500
E. Farefield, three-story flats, 24 by 60, 398 Garfield avenue..... 6,000
H. Foborg, two-story dwelling, 25 by 44, 425 South Morgan street..... 2,000
John Krueger, three-story dwelling, 22 by 72, 7 Wells street 5,000
E. Destifand, three-story store and dwelling, 25 by 100, 416 South Clark street..... 5,000
A. C. Smelt, two two-story dwellings, 41 by 38, 643 South Wood street.... 6,500
Riehard Knisely, three-story store and flats, 35 by 75, 881 Lake street.... 10,000
H. Zimmerman, two-story dwelling, 21 by 60, 736 North Paulina street.... 3,500
John Swanson, basement and addition, 20 by 46, 148 Wesson street..... 2,000
Fred Tietyle, two-story dwelling, 20 by 50, 560 Nineteenth street..... 3,000
August Schultz, two-story dwelling and store, 27 by 60, 3848 Cottage Grove avenue..... 8,000
J. V. A. Weaver, three-story flats, 20 by 75, 213 Illinois street..... 8,000
Meaeham & Wright, two-story dwelling, 25 by 70, 567 West Jackson street 7,000
Britten & Luth, two two-story dwellings, 23 by 58, 3412 South Park avenue..... 12,000
Peter Adler, three-story dwelling, 24 by 66, 267 East Huron street..... 8,000
C. E. Biglen, two-story dwelling, 22 by 48, 265 South Wood street..... 2,800
Waldemeir, Mortenson, two-story store and flats, 25 by 46, 332 West Indiana street..... 2,500
J. Beeeker, six two-story dwellings, 100 by 66, 3310 to 3350 Forest avenue. 20,000
Fooley & Maloney, two one-story eottages, 20 by 34 eaeh, Butterfield, near Thirty-sixth street..... 2,000
E. Jalory, two-story flats, 21 by 48, 66 Wesson street..... 3,000
Lindahl & Johnson, two-story flats, 22 by 70, 148 Oak street..... 5,000
Aug. Sickel, two-story store and flats, 25 by 68, 879 North Halsted street.. 3,000
H. Will, two two-story dwellings, 44 by 73, 481 and 483 Adams street..... 7,000
B. W. Smidt, two-story store and dwelling, 25 by 60, 715 Ogden avenue... 4,000
John Reddy, two-story dwelling, 22 by 50, 3455 Dearborn street 4,000
G. M. Gugrieh, two-story molding faetory, 75 by 75, 15 to 19 Armour street 6,000
G. Sporrer, three-story dwelling, 25 by 68, 507 North Clark street 7,500
E. Eutsehetz, two-story dwelling, 23 by 40, 485 North Franklin street.... 2,400
W. Mukle, three-story dwelling, 21 by 52, 301 Morgan street..... 2,500
Jno. Lladiek, two-story dwelling, 21 by 24, 827 Allport avenue..... 3,000
James O'Callaghan, three-story store and flats, 46 by 63, Halsted and Thirty-fourth streets..... 7,000
Wm. Bohacek, two-story dwelling, 21 by 44, 3515 Fifth avenue 2,000
Juo. Cudaly, two-story barn, rear 3243 Wabash avenue..... 3,000
J. Parker, two-story dwelling, 22 by 45, 44 O'Brien street..... 3,000
A. Chemelek, two-story dwelling, 21 by 58, 737 Loomis street..... 3,800
F. Lrahbmann, three-story dwelling, 25 by 70, 515 North Clark street..... 10,000
W. W. Cole, two-story dwelling, 25 by 96, 284 Rush street..... 10,000
John Schlly, three-story store and dwelling, 24 by 74, 511 South Halsted street..... 7,000
J. Keighher, two-story store and dwelling, 25 by 60, 428 Indiana street.... 4,000
C. B., of Chieago, three-story aeademy, 113 by 90, southwest corner Park avenue and Oakley street 30,000
Isaae Tomlinson, four-story factory, 50 by 123, Arnold, near 23d street... 20,000
C. O. Gleeson, two two-story dwellings, 33 by 48, 3624 and 3626 Stanton street..... 4,000
M. Gaensburg, three-story dwelling, 32 by 67, 603 Dearborn street..... 10,000
Jas. Koerper, two-story dwelling, 22 by 60, 582 Wells street..... 3,000
Herbert Cassard, three-story store and dwelling, 105 by 66, 3300 to 3308 State street..... 35,000
Paul Classus, two-story store and dwelling, 25 by 110, 260 Lineoln avenue 6,000
J. H. Pearson & Co., one-story shoeing house, 30 by 77, 764 to 782 South Canal street..... 2,000
Carl Hoehstadt, three-story dwelling, 22 by 57, 569 Wells street..... 5,000
Dr. Knox, two-story dwelling, 22 by 80, 610 Fulton street..... 4,000
H. Stantz, two-story store and dwelling, 25 by 45, 2725 Wentworth avenue 3,200
Chas. Follinbee, two two-story dwellings, 33 by 40, 469 Warren avenue... 3,500
John Kedzie, two four-story stores and dwellings, 44 by 72, 471 and 473 Madison street..... 22,000
H. Hemmelgarn, two two-story dwellings, 50 by 36, Fullerton avenue and Harrison street..... 14,000
J. A. Sweet, two-story dwelling, 27 by 66, Warren avenue, west of Leavitt street..... 8,000
J. G. Owsley, two-story dwelling, 20 by 63, Adams, near Robey street.... 8,000
J. Jaeobson, four one-story eottages, 20 by 32 eaeh, 781 to 785 Seymour street, and 738 to 740 Donia street..... 4,000
C. Busby, three two-story dwellings, 69 by 64, 11, 13 and 15 Carpenter street..... 10,000
C. Busby, three-story store and dwelling, 24 by 67, 753 West Madison street 8,000

Lumber Notes.

MR. GEORGE W. HOTCHKISS, secretary of the Lumberman's Exchange, has returned from a brief trip to Europe.

IN the United States, Ontario and Manitoba the increase of the lumber produced over any preceding year is placed at 750,000,000 feet.

A CORRESPONDENT estimates the logs cut on the Northern Wisconsin (Omaha) line at 85,500,000 feet, and the amount of dry lumber on the line will not exceed 10,000,000 feet.

THE Ashland Company (Minnesota) has sold two cargoes of English white pine deals, which are to be shipped direct to Liverpool *via* the Welland canal. They will be delivered to propellers sometime in August.

THE Custom House records show the shipments of the forest products of the Saginaw river for the month of May, in round numbers, to be: Lumber, 94,543,334 feet; shingles, 16,930,000; lath, 4,328,000; staves, 54,791; oak timber, pieces, 387.

THERE is a reasonable prospect that about 100,000,000 feet of logs on the Upper Mississippi river will hang; about forty per cent of the Chippewa river cut is hopelessly hung; about half of the Black river cut is out or regarded as safe, making the total turnout to date 70,000,000 and nearly as many more feet safe.

A WHITE LAKE mill owner mentions the fact that the call for railroad ties to go East has reached Lake Michigan ports. A contract has been make to ship 36,000 ties to Buffalo, to be used in railroad work in western New York. The party referred to mentions it as the first instance of a heavy shipment of railroad ties to the East from his section, and as significant of a growing scarcity of timber in eastern Michigan.

A BRAINERD, Minn., dispatch of May 29 reports the result of an inspection of the Upper Mississippi timber wilderness shows the aggregate of logs hung up is 25,000,000 feet, which is one-fourth of the average crop which comes past Brainerd annually. In one tributary of the Mississippi, Swan river, there is a jam of thirty-five miles with 40,000,000 logs in it, which cannot get through without rain. There was a larger cut made last winter than is generally believed, but is unlikely to get to market.

THE Webster Manufacturing Company recently purchased an immense tract of hard wood land, containing 43,000 acres, about fifty miles from St. Paul, for which they paid in the neighborhood of $300,000. The St. Paul company are going to run a branch of their road through it, as the Webster company will at once build two large mills, a hub and spoke factory, and a barrel factory on the tract. It is expected that the timber will more than pay for the land, and the land itself, when cleared, will be of immense value, it being of good quality and well located. They, no doubt, will make a large amount of money out of the transaction.

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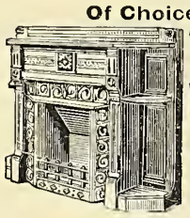
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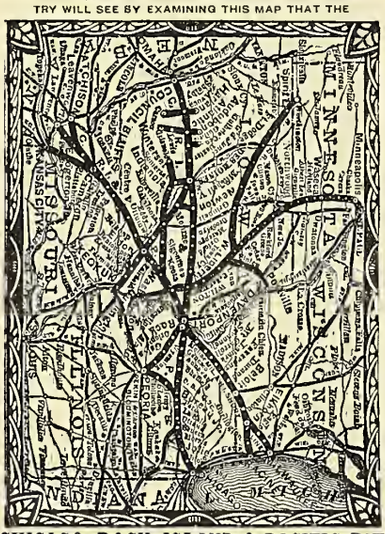
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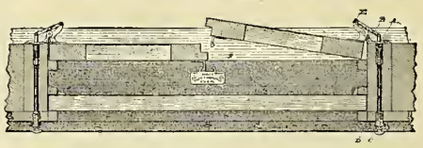
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THE INLAND ARCHITECT AND BUILDER.

Vol. I. No. 6

JULY, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE ONE DOLLAR PER YEAR.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

SUBSCRIBERS SWINDLED.

Numerous letters have come to us from New York, Boston, St. Louis, and other points, complaining that the writers had subscribed for THE INLAND ARCHITECT AND BUILDER and not received it. Investigation shows that a swindler named W. H. Gault has been personating in the East R. C. McLean, editor of this paper, and he has harvested a large number of subscriptions. Gault is rather under medium height, has light complexion, and a peculiar, one-sided appearance of the mouth. In St. Louis a number of subscriptions have been taken by a fraud signing himself W. H. Barker, agent. He is described as being about 45 or 50 years old, some six feet tall, and with grayish hair and beard, and a smart talker. These men are impostors, and are wholly unauthorized to represent us in any way. Subscribers should insist on canvassers showing satisfactory credentials from this office or from responsible subscription or news companies. If circumstances are suspicious, send subscription direct to this office.

FROM well-authenticated information it was manifest that an imperative necessity existed for a change in the method of providing the government with buildings, and we were hopeful that the now progressing investigation of the Supervising Architect's office at Washington would prove to be something more than a mere gloss-over of known abuses. It is quite clear this hopefulness was based upon a delusion, as the how-not-to-do-it policy of the Secretary of the Treasury is so well adapted to a first-class veneering job, that it will not be his fault if everything that needs to be covered up is not so thoroughly hidden the people will never know how greatly they have been outraged in the squandering of millions of dollars on meretricious buildings, and for work that never was done. Nevertheless, with all the handicapping it has not been possible to hide the fact that abuses have abounded in the Supervising Architect's office, and of so flagrant a character, that should the President, without waiting for the assembling of Congress to provide a better way and means, in his indignation at the offenses instantly dismiss the whole outfit, from Supervising Architect down to the humblest clerk, and "shut up the shop," the people would not become alarmed at any assumption of despotic power, but we apprehend, *au contraire*, would hold the act in livelier remembrance than any other of his administration. This being effected, as we have suggested, the supervision of the government's architectural affairs can be placed in the hands of the engineering corps, and the architects and contractors employed from among those most reputable, and by the same method as pursued in the designing and erection of the buildings of private individuals or corporations.

THE growing evil of the times, catered to and seemingly fostered by all classes of business in the fabrication of "cheap" wares—educating the people to take advantage of their fellows by leading them to look for a more than fair equivalent for their money, has made no more deplorable display of its demoralizing effects than in the field of architecture and building. The truth of this allegation needs no other confirmation than will be found in a casual examination of the buildings that have been erected in this country within the past few years. In Chicago, which in this respect is probably no worse than many other cities, we may safely say there are thousands of houses greater wrecks after a five or six years' existence than a century's use and exposure could possibly have made them had they been honestly constructed.

Unquestionably, in many instances, these failures are the product of an unfortunate compromise of planner and builder with the cupidity of men who wish for large returns in rentals from small investments, and speculators in real estate who project such architectural deceits for "equities," or to dispose of adjoining lots at prodigious prices. Yet, the most of them are the result of ignorance and a false economy in the owners, who subsequently learn through the continual round of expense attendant on the maintenance of their questionable shape of habitation of vermin or human, the sad lesson of their folly.

Since the legislation of the day in regard to this admitted evil does not appear, either through the dereliction of those whose duty it is to see the law is executed or from the inadequacy of the law itself to stay it, it devolves upon the architects and builders, through the channels of

"associations," to stand up as an uncompromising barrier between the people and this eupidity and ignorance, and deeline hereafter to be a party, in any sense, to any other than honest building.

Sueh a line of aetion would bring about an honorable eompetition that would effeetively assail the evil in its stronghold. With arehiteets inspired only with a spirit of just pride and emulation; diligent to see their plans and designs carried out in their fullness; knowing the market value of the material entering into the eomposition of buildings, as well as the market priee of labor, and eapaeitated to diseriminate between legitimate bids and those ineipient of fraud; rejeeting sueh as failed to reeognize a reasonable profit to the eontractor for honest work, would make it in the future impossible to perpetuate those arehiteetural enormities now raising on every hand—a disgraee to our eivilization.

Apparently the only hope of the eountry for a eorreetion of this great evil is by a eompulsory edueation in building ethies at the hands of honorable arehitects and builders, who, by a severe disciplining of the unworthy, whenever and wherever an infraetion of the law of honesty in building obtains, would speedily end it.

Certainly it is high time that some adequate steps were taken in this direetion.

THE responsibility or liability of the aetual owner of realty to a non-tenant who may be injured through any defeetiveness of the premises has just been deeided in Texas. An action for damages for injuries suffered in erossing a defective passage-way in a building was brought against the landlord. This passage-way was on the seeond story of the building, whieh was rented to different persons for offiees and bedrooms, and the plaintiff was legally in the building. In this ease, Marshall vs. Hoard, the plaintiff was defeated, and he appealed to the Supreme Court of Texas, where the judgment was affirmed. Judge Waite, in the opinion, said: "It appears that the plaintiff was in the passage-way, not on the invitation of the defendant, but of one of the tenants on the seeond floor. At eommon law the oeeupant, and not the owner, is bonnd as to the publie to keep the premises in sueh repair that they may be safely visited by the publie, and the oeeupant is liable, *prima facie*, to third persons for injuries. And when there is a liability on the part of the landlord it exists only in favor of persons who stand strietly upon their rights as strangers. Those who elaim on the ground that they were invited into a dangerous plaee must seek their remedy against the person who invited them. If they are the guests of the tenant, he, and not the landlord, is the person from whom they must seek redress for injuries by the defeets in the premises."

THE master plumbers of the eountry have just elosed a conclave at New York eity for the purpose of establishing a national organization, looking after the welfare of the craft. As to what was done, the meager telegraphie reports of the meeting leave us somewhat in the dark, yet, it appears, in looking after the general weal of the fraternity, the ethics of the craft was eonsidered of sufficient importanee to call for the adoption of a resolution providing for an examination into the moral and intelleetual eharaeter of applieants for apprenticeship, and extending the term of tuition to five years. We are not in aecord with the burlesquing of this important gathering by the Associated Press, whieh afforded no intelligent information of what was done by the eonvention, for we believe in eo-operative movements of this eharaeter if, when in looking after the rights and interests of Number One, the rights and interests of Number Two are not forgotten and are recognized.

THE Supreme Court of Illinois has reeently rendered a very important deeision, whieh affeets all elasses, and has deeided and settled a question that has very generally been held reversely, namely, that Sunday eontraets are not binding. The eourt holds that they are legal and hold binding. The ease which brought out this decision was a *verbal* one between a vessel owner and a vessel master. The former, W. E. Riehmond, engaged the latter, Chas. K. Moore, in February, 1882, to eommand the sehooner Tempest at $1,000 for the season. Subsequently Riehmond baeked out. The eaptain, depending upon the engagement, refused other vessels that were offered him. The suit originally eame up in the superior eourt. The defendant first alleged the eaptain had not aeeounted for eertain money to a Mr. Bruee, owner of the Champion, as the grounds of his refusal. Mr. Bruee swore that he did aeeount for the money. The defendant then fell baek on the faet that the agreement to employ the plaintiff was made on Sunday, and that it was null and void, and, further, there was no written agreement or eontraet. The eourt deeided Captain Moore's eontraet was a good one and binding, and allowed him the season's pay ($1,000), after dedueting what he had earned on another vessel, whieh entitled him to $566. Riehmond appealed to the appellate eourt, whieh deeided the superior eourt was right, but allowed the ease to go to the supreme eourt for the reason, although a small case, it involved a great question, and was one on whieh the supreme eourt had never passed. The supreme eourt affirmed both deeisions below.

Sunday contraets are hereafter legal, and all people are to eonduet their business and make their eontraets with this faet in view.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART V.—EGYPT.

AT a period far remote, more than four thousand years before the present era, a great and populous people oeeupied the valley of the Lower Nile. Memphis was their eapital city. Cheops, in the vigor of youth, oeeupied the throne. The mummy of his father, Snefron, reposes in the pyramid of Meydoum, some thirty miles above the eapital, on the left bank of the great river.

Cheops, the king, belongs to the Fourth Dynasty. The period is known as the Old Kingdom, or the Aneient Empire, and the first ten dynasties of kings are ealled the pyramid builders.

The history of the first three dynasties is lost in Egyptian darkness. Menez was the first king, who lived, aeeording to the latest ehronology, about the year 5004 B.C.

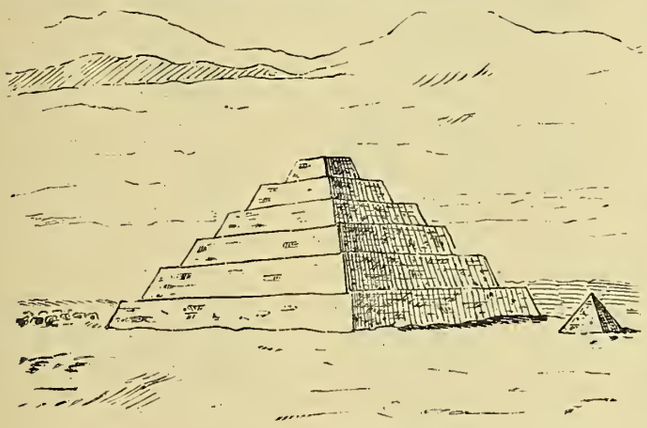
The step pyramid of Sakkarah tradition attribntes to the King Onenephes, of the First Dynasty. If this is eorreet, for it is not fully established, it is the only pyramid remaining to represent the three first dynasties of Egyptian kings.

It would seem to be a religious belief during the Aneient Empire that if the mummy could but remain undisturbed for three thousand years, the spirit that left the body at death would then return, and life would be resumed exaetly where it left off three thousand years before, in the midst of old friends, relations and servants, and be eontinued in health and happiness forever after-

ward. This belief is pictured on the early tombs. They show nothing of a funereal character; the defunct is represented engaged in those occupations he most enjoyed during life. With this belief it can be easily understood that a great and powerful monarch like Cheops, whose will was the supreme law, would commence his pyramid, according to the fashion of his time, for the protection of his mummy, as soon as he was fairly seated on his throne. To this end a site was selected on the left bank of the Nile, opposite Memphis, just beyond the cultivated ground, on the edge of the desert, near the Great Sphinx, and leveled off. The excellent limestone of the neighborhood was quarried and the pyramid commenced.

A pyramid was not built like an edifice of the present day,—the entire foundation laid out in the first instance, and the entire structure carried up story by story.

A pyramid should be as large as the king could build during his reign. As life was uncertain in those days, it was necessary to so construct the pyramid that it could at any time be quickly finished.

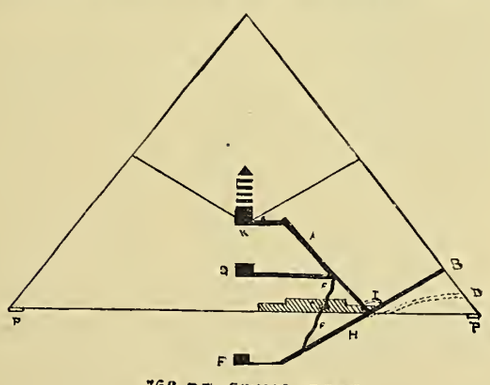


SAKKARAH RESTORED

A small pyramid was built in steps, like the step pyramid of Sakkarah. In this were the passageways and burial-chamber.

This pyramid was covered with an envelope, also in steps, and thus the size was gradually increased, and at the same time the pyramid always preserved in a condition that admitted of its ready completion, either by the king in his declining years, or by his relatives should he be suddenly removed.

The largest pyramid is that of Cheops, though that of his successor, Chepheron, is but little inferior.



768 FT. SQUARE AT BASE

CHEOPS

K is the king's chamber, where the empty sarcophagus was found by Al Mamoun.
Q is called the queen's chamber, for which there is no authority-whatsoever.
B is the entrance that was closed by the revetment of inscribed stone that once covered the entire pyramid.
E F H are passages and chambers that would seem to be constructed to mislead those that might find their way into the pyramid, for the passages to the king's chamber *K* were closed by large stones sliding in slots.
V—Ventilators.

In the year 825 A.D., the Caliph Al Mamoun, son of Haroun el Raschid, of the Arabian Nights, in the true spirit of his time, conceived the idea that such a stupendous construction, apparently for no purpose, could only contain an enormous treasure, and, therefore, broke his way in. The true entrance *B* was hidden, but as all pyramids are entered from the north, the point *C* was chosen, and the work commenced. The stone was so hard that the workmen were upon the point of abandoning the undertaking, when a lucky blow shook down the gate stone, suspended in slots at *I*. This was considered a good omen, and a hint from the Genius of the pyramid to proceed. The entrance was soon forced and the passages leading to the king's chamber reached, but naught was found except an empty sarcophagus. The tomb had probably been rifled long before, maybe in the time of the Persian conquest. Some sixty or seventy pyramids have been explored, all of which appear to be royal sepulchers. There has been much foolishness written about the so-called "Religion of the Pyramids." Intelligent men have wasted much time and ingenuity in measuring the great pyramid in English inches—a modern invention. The Rev. Dr. Seiss, of Philadelphia, published a book in 1877 entitled "A Miracle in Stone." He sees in the great pyramid a work inspired by God—a whole system of theology and science. He reaches wonderful conclusions by adding, subtracting, multiplying and dividing pyramid measurements, astronomical distances, mean temperatures, etc., and reaches the melting point of platinum, the circumference of the earth, or the cubical contents of the Ark of the Covenant, and such like things. It is often said that "*figures won't lie*," but there is nothing that can beat them when some fanatic tries to prove that the world will end at a certain date, or that all the known sciences and mathematical discoveries are foretold in the one great pyramid.

Auguste Mariette Bey, a French Egyptologist, in charge of the museums and monuments of Egypt—the best known authority on all such questions—says: "As to the especial purpose for which the pyramids were intended, it is doing violence to all that we know of Egypt, to all that archæology has taught us on the subject of the monumental habits of the country, to imagine for a moment that they could ever have been intended for aught else than tombs.

"The pyramids are tombs, massive, entire, everywhere hermetically sealed, even in their most carefully constructed passages; without windows, without doors, without external openings of any kind. They are the gigantic and ever impenetrable sepulcher of a mummy. And even had one of them exhibited in its interior an accessible passage, from whence, as from the bottom of a well, astronomical observations could have been made, that pyramid would not have been in accordance with its purpose. In vain shall it be said that the four sides, turned to the different points of the compass, denotes an astronomical intention; the four sides are thus set because they are dedicated, for mythological reasons, to the four cardinal points; and in a monument so carefully constructed as a pyramid, a side dedicated to the north, for example, could not, by any possibility, be turned to any other point but the north.

"The pyramids, then, are nothing but tombs, and their enormous bulk could not be held as an argument against this theory, since there are some which are scarcely eighteen feet high. Moreover, there does not exist in Egypt a single pyramid that is not the center of a necropolis—a fact which confirms in the most emphatic manner the character of these monuments."

What remains now of the pyramids is only the nucleus. Originally they were covered with a smooth casing terminating in a sharp point; this casing has entirely disappeared.

Being tombs hermetically sealed, each one of the pyramids, or at least each of those that served as the sepulcher of a king, possessed an exterior temple which was built within a few yards of the eastern façade. The king deified, as a sort of incarnation of the divinity, was here worshiped.

The three great pyramids of Geezeh possess like all other pyramids each an exterior temple.

About 600 yards to the southeast of the great pyramid is the Sphinx, a natural rock, a part of which has been cut

into the shape of a gigantic human head, representing the god Æmachis.

Near the Sphinx is a construction about which there has been much discussion. Some think it a tomb, others a temple. It would seem probable that it is a very ancient tomb, older than the pyramid, for there was found a tablet on which King Cheops ordered repairs to the Sphinx, which as a statue of a god adorns this tomb.

The pyramid of Cheops stands in the necropolis of Memphis. The tombs of the necropolis date from almost every period, those of the ancient empire predominate. These take the form of a truncated pyramid, built of enormous stones, and cover the well at the bottom of which reposed the mummy.

Sakkarah, a little further up the river, is very rich in ancient tombs. The exterior is a small building containing one or more chambers. These chambers are almost all decorated. Those of the ancient empire are as little funereal as possible. The defunct is represented standing or sometimes seated with the staff of office in his hand, his wife by his side, his children close by, his servants standing before him; in some, women of his household are dancing, musicians are playing on various instruments, and singers accompany them, beating time with their hands. In one picture the defunct is shooting in the marshes; he is standing upright in a bark made of papyrus reeds, with one hand he holds some call-birds, and with the other he lets fly over the aquatic birds dispersed among the tall reeds a curved stick which whirls round and round. Near by in the water are hippopotami and crocodiles. On another picture are charming representations of pastoral life. These chambers were open to all comers, and on fête-days the relatives met together here, bringing offerings of all sorts called funereal gifts.

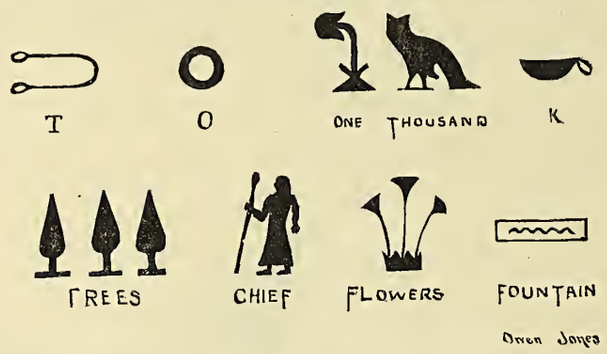
After the ancient empire the religion undergoes some changes. An army of strange and fantastic gods has invaded the walls of the tombs, and the defunct is seen in the other world peopled with beings mostly impossible to describe.

In regard to Egyptian chronology I shall say but a few words, the whole question is too complicated to be discussed here. The authorities are the lists of Manetho, an Egyptian priest, and the monuments. The works of Manetho are unfortunately lost, but extracts remain. There are lists taken from Julius Africanus, and the two versions of the chronicle of Eusebius, which, however, do not agree. The authority of Manetho, an Egyptian priest writing of his own country from the archives of the temples, must always carry great weight. These studied in connection with the inscriptions so numerous everywhere on the monuments have enabled Egyptologists to arrange an outline of Egyptian chronology.

The Ancient Empire dates back so far in the past as at first to excite incredulity. Certain it is that the more that is known the more remote these dates become. Fergusson, in 1849, placed the ascension of Menez, the first king, 3906 B.C. Mariette Bey, in 1877, after long study in Egypt, with all the advantages the Khedive and a long preparation could give, placed the commencement of his reign in the year 5004, expressing the belief that could the lists of Manetho have reached us intact, we should find them extending over a still wider range.

The language of the Egyptians is neither Semitic nor Indo-European. It is one of the principal types of that group of languages which may be called Chamitic or Turanian. After it had greatly degenerated it became merged in the Coptic, which represents the language of the demotic or popular character rather than that of the hieroglyphs. This demotic character was used after the sixth or seventh century B.C., for deeds, books and other writings. It is called also the Euchorial. The inscriptions on the monuments are in hieroglyhics, which for a long time had been forgotten and were unreadable.

In the year 1799, Mr. Boussard, a French artillery officer, while digging intrenchments around the town of Rosetta, discovered a fragment of a "Stela," a word used in Egyptian archæology to designate a rectangular, flat stone, generally rounded at the top, which was used by the Egyptians for all sorts of inscriptions. This stone was carved in the reign of Ptolemy V. Probably it was thought little of at the time, but became the most valuable of Egyptian discoveries. It is known as the Rosetta Stone. The king came to the throne when a child, and in the ninth year of his reign, B.C. 196, when he was declared of age to govern the kingdom, the priests made a decree recounting his titles, his virtues and his piety toward the temples, and declared that his statue was to be worshiped like those of the national gods, and that it was to be carried with them in all sacred processions on the Nile. The enactment ends in the important words that "the decree is to be carved at the foot of the king's statue in three kinds of writing, namely, in sacred letters or hieroglyphics, in the demotic or common Egyptian, and in Greek." Here, then, we have an inscription in hieroglyphics with a Greek translation; with this help Dr. Young and Champollion were enabled to read this most ancient kind of writing which had been a sealed book for so many centuries.



Hieroglyphics are read from either direction as the figures face. The names of the kings are enclosed in an elongated oval terminated by a straight line. That of Chop, or Cheops, as he was called by Herodotus, was single, those of the later kings, who claimed to reign over upper and lower Egypt, were double.



CARTOUCHE OF CHOFO



The hieroglyphic of an architect is peculiar. He seems to have finished a plan of a temple which he is kicking out of his office; behind him are three stones to shy at him should the cost of the building exceed the estimate, and over his head is a gallows to hang him on should the building fall during construction.

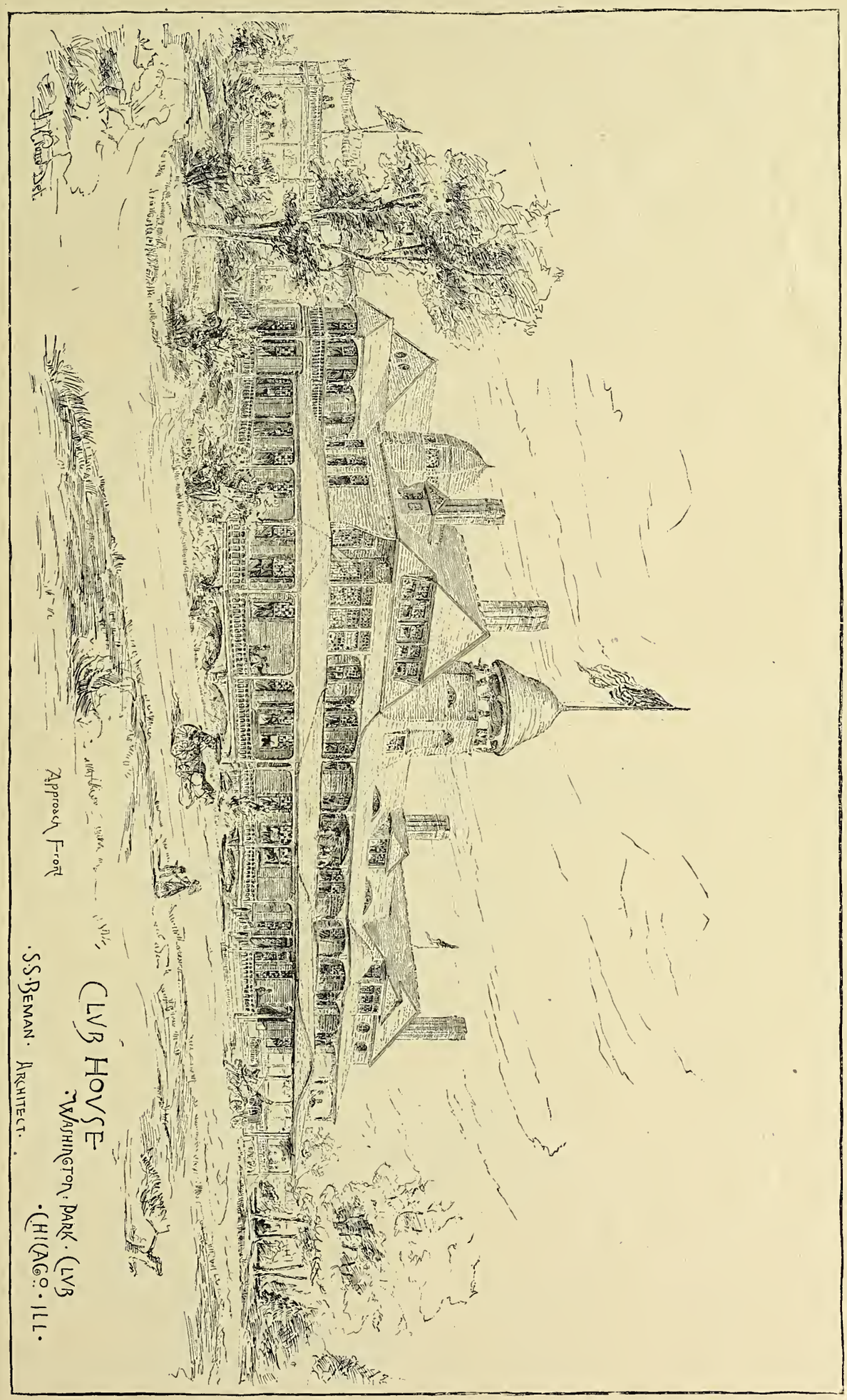
(To be continued.)

History of Chicago Architecture.

PART V.

RECOLLECTIONS OF JOHN M. VAN OSDEL.

THERE are so many points of interest in the history of Chicago, that are more or less connected with its architectural advancement, that the writer finds it difficult to arrange the matter in proper order of sequence. The necessity of elevating the grade of the city will be better understood by the following general statement of the topography of its original surface. From the Fort (at Rush street bridge) south on Michigan avenue, the surface of the ground was, as it is now, about nine or ten feet above the surface of the lake. The surface drainage was from Michigan avenue west to the river, and from State street west was nearly a level plain, elevated some two or three feet above the river. The topography of the north division


CLUB HOUSE
WASHINGTON PARK CLUB
CHICAGO. ILL.
S.S. BEMAN. ARCHITECT.
Approach Front

was similar, the surface declining from Rush street toward the west. The surface-water cut large gullies in the soil, known as sloughs; three of these sloughs opened into the main river. One at State street was about sixty feet wide at the mouth, and extended in a southwesterly direction to the site of the present Tremont House. Another had its outlet between Clark and La Salle streets, and extended inland across Lake street. The third and most formidable one was on the north side, near Franklin street, being eighty feet wide at the river, and extending north through the Kingsbury and Newberry tracts to Chicago avenue. In 1838 the city employed the writer to build a bridge across this last-mentioned slough at North Water street, at the same time to build one across the north branch of the river, for the continuation of North Water street to the west division, being the first bridge across the north branch, and occupied very nearly the position of the present Northwestern railroad bridge. The bridges were supported on piles; that across the river was furnished with a platform thirty feet long, which was counterbalanced with weights, and was made to rise from a horizontal to a vertical position to admit the passage of vessels. The depth of water in the slough was sufficient to float the scow on which the pile-driver was arranged, and broad enough to allow the necessary movement of the vessel to bring the piles into their proper position. There were no lumber-yards in the city prior to 1839. Vessels loaded with lumber would tie up close to the river bank and deposit their cargoes in a promiscuous pile; builders would purchase in large quantities and do their own assorting. Geo. W. Snow established the first lumber-yard in 1839, occupying a lot 80×150 feet on the southwest corner of State and South Water streets. The next year Sylvester Lind opened a small yard on the triangular lot formed by Randolph street on the south, Market street on the east and Water street on the west. This lot is not now in existence. It seemed to be an encumbrance, and the city made an arrangement with Lind to give him the water-front lot immediately north of Randolph street bridge for his triangular lumber-yard. Mr. Lind erected a large five-story block of buildings on this lot (being remarkable as having been unharmed by the great fire of 1871, which destroyed every building in its neighborhood). These two little lumber-yards were the pioneers of the great establishments of the present day. The grade established by the city in 1855 made it necessary to build stone walls around each block to retain the filling of the streets. These walls placed under the outer edge of the sidewalk are known as "curb-walls." The spaces between these walls and the buildings have been utilized by the property owners as extensions to their basements or cellars. Temporary sidewalks of plank were arranged on these walls, with rude stairs leading down to the stores. The "public square" had to be filled and its surface raised to grade. The court-house in the center of this square was 164 feet front from east to west, and 132 feet from front to rear. The Cook county jail was arranged in the basement of this building. It would not do to interfere with the light or ventilation, so an area wall was built on a circular plan, 180 feet diameter, circumscribing the entire building. This wall was raised three feet above the street grade, had coping of heavy cut stone, surmounted with massive iron railing. This arrangement gave ample areas for light and ventilation. The square was filled to conform to grade, with earth obtained by dredging the river. Mr. James Brown, of Boston, an expert in raising buildings, contracted with J. D. Jennings, to raise his store on the northeast corner of Dearborn and Randolph streets. This was done in 1857, and was the first brick building raised to new grade. An entire block of heavy buildings on north side of Lake street, extending from Clark to La Salle street, was raised simultaneously. This was accomplished in 1859. The raising-business extended through seven years, from 1857 to 1864. The first sidewalk formed of self-supporting cut stone was placed in front of the McCardle restaurant, on the east side of Dearborn, between Lake and Water streets. The stones were twelve feet long and six inches thick, resting on the curb-wall at one end, and upon a light brick wall at the other end. There was some hesitation at first in adopting the cut-stone vault-covers, and on three several occasions parties endeavored to construct a series of flat, thin brick arches, abutting in rolled iron beams, to support a pavement to form sidewalk, but they persistently and uniformly collapsed as soon as the centers were removed from under the arches. The prejudice gave way very soon, and the cut-stone covers came into general use. Mr. Reed, the druggist, in 1860, had a sidewalk constructed in front of his store, on north side of Lake, between Clark and LaSalle streets, formed of a single stone, twenty feet four inches long, sixteen feet wide and ten inches thick, weighing nearly twenty-two tons. This stone was from Singer & Talcott's quarries at Lemont. It was transported by canal-boat to Chicago, and moved on rollers from the boat to the building. It was being moved about the time the republican convention was in session here, and some wag labeled the stone in large, painted letters: "The Republican Platform."

Art of Pure Color.

BY JOHN W. ROOT.

TO painting, one of the greatest limitations is that it has been compelled to deal with subjects capable of being outlined, and a slight glance at nature will show us how great this limitation is. Generally speaking, it may be said that, almost without exception, all tendency moods of nature, and those which appeal to the deepest emotions, are those where outlines are entirely subordinate, and colors salient—twilight, sunset, soft-clinging mists of early spring mornings, waving grasses or mossy rocks upon the bottom of some crystalline brook; a thousand beauties of moonlight and starlight, the weird, fantastic scenes revealed by flashing meteors, bursting rockets or ghostly auroras, all these things, and others too endless to mention, move us to our very being, yet live in nature only. No artist who ever lived has painted more than their shadows. In the effort to reproduce these classes of phenomena upon canvas, close and accurate observation was necessary, and, unfortunately, all painters were trained by tradition and education to observe form rather than color. So true is this that every painter of eminence has lamented that he was in so many ways incapable of seeing, or at least of continuing to see, colors as they are.

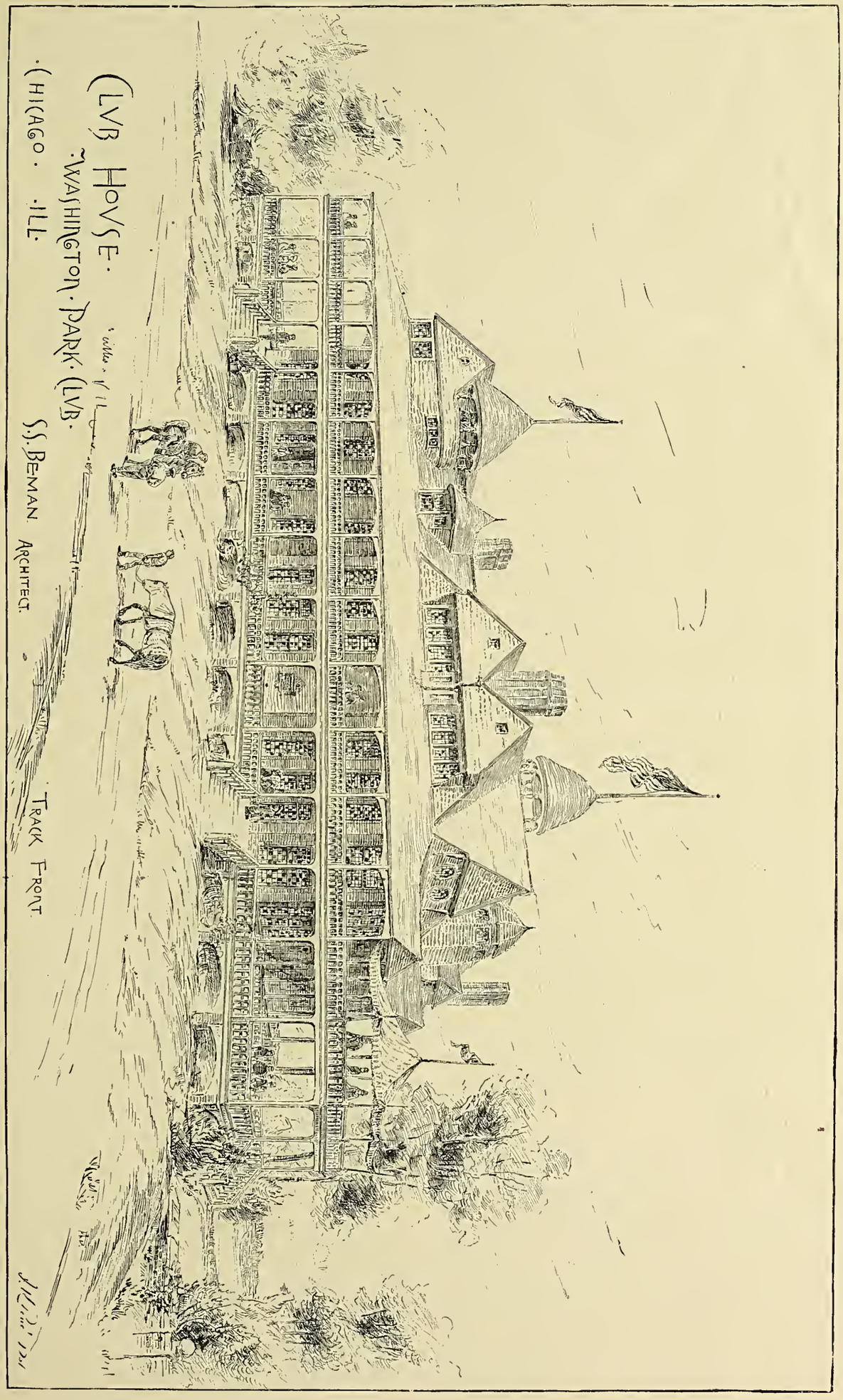
Once the notion of pigments and their conventional relations to mere color is fixed in the mind, the great difficulty is to avoid seeing colors in nature as so much Antwerp blue, or Hooker's green, or brown madder. To commit this error is to kill true art. In the effort to avoid a sin so deadly, the impressionists took upon themselves the difficult task of cultivating their power of observing absolute colors in nature, and, as we have seen, all art was the gainer.

Coincident with their efforts light was coming from a new quarter, science. In Germany and England Helmoltz, Von Bezold, Young and Tyndall were engaged in close analytic study of the science of optics and acoustics, developing in both facts which shed wonderful light upon the world of art. Among these facts were those which contributed to clearer conception of the act of seeing, as mental judgment of molecular changes, to a clearer appreciation of color-blindness and effects in color of contrast and gradation, and to a new conception of primary colors. In addition to these facts were others equally valuable as to the nature of light and its absorption and refraction, and the consequent true definition of color.

In this science was performing a new and wonderful work. As all modern science does, it followed the search of truth for truth's own sake, and in the search found vast treasures with which art might decorate the world. At the same time it gave to every thoughtful artist certain valuable checks upon his own less accurate observation, and certain absolute and unquestionable data, obtained by men who had no dogmas to defend nor theories to sustain. These checks and data were the more valuable to the artist, because his own observations were often made inaccurate, not only by defects of vision and by preoccupation, but also by the fact that he travels a road so often trodden by other and greater men. These, having gone before, have left for him a thousand statements of what he must expect to see at every step of his journey, and looking for these things he too often sees them where they are not or fails to find them where they are.

In science this sort of fallibility is less common, for here every observation is verified, not by the vision of a few great men, but by the logic of human reason and the test of human experience. To science, then, will art turn, that she may have her semi-paralyzed optic nerve galvanized into new and truer vision, and that she may gain from the laboratory instruments for the expression of her own thought. The aid thus contributed by science to art will lie rather in the direction of color than of form, for form is mathematical and mensurable, about which science has said all that is to be said. No increased knowledge of anatomy can help make a greater Praxiteles. But upon color the effect of scientific investigation is immediate.

By this added light art may hope to find in painting a truer representation of those effects in nature so largely dependent upon color, which has hitherto been most difficult to reproduce; for with this fuller knowledge the artist, striving to render upon canvas new


CLUB HOUSE.
WASHINGTON PARK CLUB.
CHICAGO. ILL.
S.S. BEMAN. ARCHITECT.
TRACK FRONT.

or phenomenal effects, will have new and better guides to his own impressions, as well as new and more lasting pigments on his palette.

What the full effect of this influx into the painter's art will be we cannot now say, nor, indeed, can we ever fully measure. It will manifest itself yet more strongly than it has done and in new directions, in increased precision and truthfulness of sight and technique, in wider scope of subject and in improved pigments.

Upon the arts of stained glass and mosaics, the effect of the new art will be more direct and immediate. Each of these has for centuries remained subordinate to painting. The few periods of history, when they have for a moment blossomed, not as parasites, but from their own roots, only serve to make more evident their general dependence. Yet it is evident that the glory of stained glass and mosaics is distinctive and peculiar, while subjects well adapted to painting must suffer when translated by media so crude and unyielding in form as these. In stained glass, hard lines of lead tend to destroy all delicacy of form, and in mosaics the lines of juncture are equal barriers; so that any effort to produce in either of them such effects as are possible upon canvas will only be successful at the sacrifice of their own distinctive beauties. These beauties are those of color, and of inherent brilliancy of tone. No painter who ever lived could put upon canvas a shadow of the gorgeous color that flames in a glass jewel or rondel, or that flickers in the opalescent glaze of an old majolica plaque.

This was recognized by artists in Venice and Florence, and there and elsewhere most enchanting work was done by them in glass and pottery, without for a moment departing from a true conventional treatment of their material. What these men did, we have begun to do. In Venice, Salviati has revived some of the glories of old Venetian glass, but here in America the art of stained glass manufacture and design has taken higher rank than elsewhere. Once the limitations of glass are confessed and its vital beauties recognized, it takes a new place among fine arts, for it surpasses painting in its possibilities for color, as much as it is surpassed by painting in the matter of form.

The pigments used upon canvas must always be more or less evanescent; those of glass are unfading. The ultimate crystallization of any vehicle used will always prevent painters from producing successfully the most brilliantly lighted or the half-illuminated scenes of nature, while in these, stained glass is most potent. When the artist wishes to produce mere arrangements of color and light, like the luminous flushes of dawn or the flashing crimson and gold of sunset, he can in glass vie with nature herself.

Look for a moment at several pictures which might be produced by a master in stained glass. In one is a gradation of purples, olives, black, pale opals, with a light streak or two of flashing yellow or crimson, all grouped without symmetrical form, yet all full of the utmost depth and tenderness of color. In this picture lurks the beauty of twilight, when the last rays of the departed sun were almost gone, none left but such as had been caught and tangled in the clouds.

In another symphony (to use the Whistler term) are leaded together by waving lines a series of colors, beginning at the bottom with deep greenish blue, and ceasing at the top with pale sea green. In these colors are infinite changes, varying with each new slant of the sun's rays, and full of the shimmer and translucence of the sea itself. Through this deepening sea and beyond are seen flashing colors of fish, pale crimson of coral and rainbow tints of shell, with colors of sea-anemone and seaweed, and the gold of seasands.

In another picture, against the pure blue of a morning sky, is drawn the rough yet firm line of an old stone wall, upon which, all gray and brown, grows a profusion of morning glories. They rest upon the sober colors of the stone in deep greens and purples, gradually growing lighter toward the top of the wall, and there flash into a wealth of opals, brilliant green and rosy tints, lustrous with the glow of morning shining through, and full of the sparkle of dew.

In these, which are but three of a thousand possible pictures, the charm lies in purity and brilliancy of coloring and in their ever-varying tones. In painting, the intensity and shade of any color, once determined, remains fixed; but in glass, while a color retains its general tone, it is endlessly changing, as in nature. Hence, whatever arrangements of color may be found in nature may be reproduced in glass.

The same charms characterize mosaics in a lesser degree, and for this reason both glass and mosaics have been, and will again soon be unfailing resources for all sorts of decorative effects. Think for a moment what our streets might become, if to the somber grays of stone or reds of brick were added the full unfading bloom of glass, marble and tiles. These combined by artists of sensibility, who would defer somewhat to the relatively repressed type of the Anglo-Saxon race, would fill our cities with the eternal joy of color. Every one will recognize how vast the change would be and how greatly it would contribute to our pleasure. Look back but a few years and recall the period when red brick began to be used with some appreciation of its inherent beauty. What oases in our street architecture these glowing walls of brick presented, contrasted as they were with all the smoke-begrimmed and smoke-absorbing stone fronts! These were related to what had gone before, as a single harmonious chord would be to mere noise; but in a few years there will be everywhere, as in a lovely symphony, the full verdure of woods, the warm blue of summer sky, the eternal joyousness of blooming flowers, crystallized into unfading colors, and greeting us in our daily avocations. Indeed, I see no limit to what may be done when we have artists educated to a nice sense of blended and complementary colors. Why should not the entire front of our house be encrusted with the wealth of colored glass and encaustic titles? If this were so the dignity of the architectural artist is enhanced, and architecture rises one grade higher among the "fine" arts. Now, it is mainly at its best the negative politeness of no offense, while then it would become a positive politeness conferring high pleasure. To those of us who have shuddered over the monstrosities which greet us in our daily walks, I confess there is something appalling in the thought that to the perpetrators of these will be given another and far more potent means of offense. But we must remember that the older type, which was planted a hod-carrier and bloomed an artist, is obsolescent and must soon die, and in their stead there will be men who are in their own arts at least a little above the grade of the educated laity. This sounds like the weather prophecy of a Wiggins, but I make it with the same confidence of my prototype. Now, in the painting, every true artist of an architectural subject, as Church's "Parthenon," or Fortuny's "Mosque at Cairo," or Earle's "Stirrup Cup," each wall surface or column gains new interest from its varied coloring. Soon the same beauty will cover every creation by the true artist in more lasting materials, and we will learn to forestall the witchery of time, or the tender embroidery of mosses and lichens, with loveliness almost as great.

Special Correspondence.

MINNEAPOLIS.

Minneapolis, Minn., July 3, 1883.

Editor Inland Architect and Builder:

There are signs of a lull in the real estate "boom" in this city, due to the very hot weather of the past four days. The market is still in a healthy condition, and prices are normal rather than speculative.

The total transfers of real estate for the first half of 1883 number 5,260, with considerations amounting to $13,669,782. Judging from previous years, these figures will easily be doubled for the whole of the current year. The transfers of St. Paul covering the same period are figured at $8,110,750, a smaller sum by one-third than Minneapolis shows, but yet a very large one as compared with Eastern cities.

In a majority of cases these transfers are to persons from the East, who come to these cities to invest money, sure of a rapid rise where population doubles on itself every decade.

The increase in population here will be this year probably fully 20,000, owing to the getting into working shape of the new railroad shops of the Chicago, Milwaukee & St. Paul railway and the Minneapolis & St. Louis railway. These, with additions to our harvester works and flouring-mills, will employ over 3,000 more men than last year.

A thorough canvass by the *Real Estate Review* of this city shows, built or in course of construction this year, 1185 residences and 337 business buildings, the latter having a frontage of 8,150 feet, and a value of $2,471,310, the residences footing up $2,585,250, making a total up to the time of making the canvass of over $5,000,000, and with late additions the figures run up to over $7,000,000, with the probabilities, judging by the ratio of previous years, of the grand total being over $15,000,000 worth of improvements for 1883. Last year's record ran up to $10,000,000, but that was thought exceptionally large.

The new West Hotel, to cost $1,000,000, is progressing handsomely, but much regret is expressed that above the first story it is to be mixed brick and stone, and Architect Buffington's taste in this particular is a subject of adverse criticism.

The Board of Trade have sought to influence Architect Hill, of the Treasury department, to combine with the proposed postoffice the new structures proposed for the city and county, so as to make of the joint affair an elegant building. The attempt will probably not succeed.

The proposed building by the government here is to cost $200,000. Two stories in front with a turret or two, the rear part being only one story.

The *Tribune* company will commence the erection of a six-story and tall lined building this summer, the estimated cost being about $150,000, and the edifice a very handsome one.

Preparations are going forward actively for the erection of the new Union depot by the Manitoba (St. P., M. & M.) Railway Company, the excavations being well under way. Their stone arch bridge now being built across the Mississippi, below the falls, is a handsome structure, and will be completed within a year.

DES MOINES.

Des Moines, Iowa, July 3, 1883.

Editor Inland Architect and Builder:

The continuous rains throughout the entire months of May and almost all of June greatly retarded building operations, but the good and favorable weather of the last ten days, has furnished us a full supply of brick, and the boom anticipated in the early spring is now under full headway and even greater than was predicted. Most of the leading contractors have all they can attend to and many of them decline to even figure on the new work that is now ready for estimates.

The architects are all busy on new work, even more so than in the early season.

Six years ago, with a population of less than $20,000, two architects more than supplied the demand for architectural skill, now with a population of 40,000, ten architects are kept busy. Among the more important buildings projected and placed under contract since my last report, are the following:

A block of eight stores and offices four stories in height, pressed brick fronts with stone trimmings, located corner East Locust and Fifth streets, owned by Messrs. Christy, Theachout, Stone, Garton and Robertson, to cost $40,000.

Block of two stores and offices, southwest corner of East Locust and Sixth streets, of brick and stone. H. C. Hansen, owner; C. H. Lee, architect. Cost $6,500.

Block of three stores and offices, southeast corner of Locust and Sixth streets; block of three stores of brick and stone. Baker Bros., owners; cost $15,000; J. A. Garrety, contractor.

Block of two stores on Walnut street, between Fourth and Fifth streets, of Philadelphia pressed brick, terra cotta trimmings cost $28,000; Rogg & Detshon, owners; Bell & Hackney, architects.

Double dwelling-house on Walnut street, between Eleventh and Twelfth, of wood; cost $7,000; C. H. Gaylord, owner; Jasslyn & Taylor, architects.

Block of six residences located on East Walnut street, between Eighth and Ninth streets, of brick with stone trimmings; cost $24,000; Messrs. Brown, Ayers, Clark and Flood, owners; B. J. Bartlett & Son, architects.

Two stores of pressed brick located on Fifth street, near Locust; cost $15,000; G. W. Marquard, owner; J. S. Blake, architect.

Six stores on East Sycamore, of brick; cost $30,000; owned by Messrs. Hass and DeVotee, and others.

Block of three houses on East Sycamore of brick; Messrs. Depue, Moore and Maur, owners; cost $12,000.

Two stores on East Locust of brick, three stories high, owned by S. B. Garton, to cost $8,000.

Foster and Liebbie, architects, are making the plans for the Episcopal church, to be built of stone, to cost about $50,000.

B. J. Bartlett & Son, architects, have just completed the plans for a Presbyterian church at Higginville, Missouri, to be built of brick and native stone trimmings, to cost $10,000.

C. H. Lee, architect, has just completed the plans for the Dakota State Agricultural College, to be built of brick, cost $30,000.

A Masonic temple is about to be erected from plans by an eastern architect whose name I am unable to learn, estimated to cost $50,000.

The Academy of Music, owned by Wm. Foster the architect, is nearing completion and promises to be one of the neatest opera houses in the West.

De Moin.

MILWAUKEE.

Milwaukee, Wis., July 6, 1883.

Editor Inland Architect and Builder:

The following building news from this city will give you some idea of the progress of building in Milwaukee:

Architect Frederic Velguth is building a brick store on West Water street, 20 feet front and 90 feet deep, three stories in height, cost of which is $9,000; also a two-story brick-lined dwelling, for Mr. Wolloeger, 70 feet deep by 48 feet wide; estimated cost, $8,000. A two-story frame building on Sixth street, between Vilore and Galiena streets, 24 by 72 feet, costing $3,500. One brick store of three stories, 40 by 48 feet, situated on Fourth street, between Opper and Chestnut streets—a frame cottage on Farewell avenue, of two stories and basement, cost $3,200. Also has two churches under construction, one being in Jacksonville, about five miles from here, and one at Burnet, and is building several houses at Kansas City, which are nearly completed.

Messrs. H. C. Koch & Co., of this city, are building a town hall and engine-house at Chippewa falls. It is a two-story brick building, and includes the city offices, council chamber, municipal court, etc.; also an engine-house in this city. They are also building a residence for F. W. Noies, situated on Eleventh street of red pressed brick, and will cost $16,000. They also have a church in progress in Kanocia, which will cost $8,000, and one in Brighton to cost $10,000—a large store on West Water street, 40 by 110 feet. It is built of brick, and cost about $12,000. Have also finished a store for O. D. Bjorkuist & Son, cost of which is about $25,000. Have just finished building an oil warehouse for Mrs. J. E. Wright, located on Third street, near Clayborn, costing $9,000. Also fourteen or fifteen dwellings, which will range in expense from $3,500 to $7,000—several schoolhouses, situated outside the city, and a number of churches, including an addition to the Catholic Notre Dame and St. Mary's institute at a cost of $25,000.

Architect A. F. Mix is building the St. Paul church, situated on the corner of Marshall and Napp streets. The church, a brown stone edifice, is very massive, the style of architecture being late Roman. It contains a parsonage, with chapel, covering 120 by 180 feet. Its cost will be $15,000.

The plans for the new club-house at Milwaukee, as prepared by Mr. Mix, have been accepted. The building will be 100 feet long on Jefferson street and 57 feet wide on Wisconsin street, presenting south and west fronts, broken by an octagonal bay and tower. The style is modern Queen Anne. The foundation walls will be of Milwaukee limestone, faced with Lake Superior sandstone. The entire cost, including furnishing, will be $50,000.

Mr. Mix is also building a dwelling for Albert Conro, Esq., on Waverly place, modern Queen Anne in style. It is 40 by 65 feet, built of red brick, trimmed with red stone, and will cost about $40,000. Also an addition to the Plankinton House, on Grand avenue. The size of the building is 70 by 200 feet, five stories in height, is built of brick, and finished with all modern hotel improvements at a cost of $150,000. Also a large store on Broadway for Albert Conro, Esq. It is of red brick and terra-cotta and iron dressing. The dimensions are 80 by 120 feet, four stories, and will cost $50,000.

This architect is also remodeling a house for Hon. John Plankinton, situated on the left hand side of Grand avenue, between Fourteenth and Fifteenth streets. It is finished in the latest style, and will cost about $60,000.

Architect C. A. Gombert has four dwelling-houses under construction, the first being for John Kremer, situated on Marshall street. It is brick veneered, and will cost $10,000. Also one for L. Meyers, situated on Grand avenue, brick veneering, costing $8,000. One for L. Biersach, situated on Ninth street. It is brick veneered, of two stories and basement, and will cost $6,000; and one for D. Luess, on Hland avenue, brick veneered, and will cost $12,000. The remodeling of J. Goll's frame residence, situated on Jackson street, at an expense of about $4,500, is in charge of this firm; also the building of a three-story store, 22 by 37 feet, for A. C. Zinn, on the corner of Chestnut and Fifth street, at a cost of about $5,000. Also, for O. P. Pillsbury, a solid brick residence on Prospect avenue, Queen Anne in style, 60 by 120 feet; cost, $60,000; and a similar one for Henry Stern, costing $20,000, on Cass and Ogden streets. It is of Queen Anne style, and estimated expense is $20,000.

Our Illustrations.

We give in this number two perspectives of the club-house of the Washington Park Club, to be built at South Park by S. S. Beman, architect. This club represents the largest social society of Chicago, and the new club-house in architectural beauty and interior arrangement will equal, if not surpass, any building of the kind before projected in the West, if architectural talent aided by wealth can make it so. The plans of the interior are not fully completed and the construction cannot be at present accurately described, but for a future number full plans, details, and a view of the interior is promised.

The building boom is so great at Macon, Ga., that the various yards cannot supply builders with bricks enough to carry out their contracts.

Architectural and Building Notes.

Architect Sierks has planned a very pretty summer hotel, or clubhouse, at Cedar Lake, Ind.; cost, $15,000.

Mr. Leon H. Prentice, of the steam heating firm of Hay & Prentice, is building a residence for himself at Waukegan.

Architect Hallberg has planned a $15,000 pressed brick residence in Hyde Park, Fortieth street and Love avenue, for J. H. Conrad.

Joshua Smith is erecting a brick residence, 37 by 54 feet, on the corner of Wrightwood and Lake View avenues facing Lincoln Park, to cost $15,000.

Hughes & Sons, contractors, are building a large court-house at Pittsburgh. Spencer, of Philadelphia, is the architect. The cost will be about $150,000.

The *Inter Ocean* real-estate mathematician figures that thirty-three building permits were issued in June in the town of Lake View, and a total of 289 in the past six months.

P. B. Wight is in Washington, where, in addition to the fire-proofing on the government buildings he is also placing the fire-proof construction in the new Portland Flats. The company also have a large contract for the fire-proofing of the new St. Luke's Hospital in Chicago.

The Committee on Public Buildings and Charities of the county board have agreed to authorize architect Cochrane to prepare plans for rearranging the steam heating of the county insane asylum. He is to receive for his trouble ten per cent of the cost of the work, in the event of his plans being adopted.

Silsbee & Kent have planned for Potter Palmer two houses to of Connecticut brown stone, with Canada limestone trimmings, be built on Bank street. They will be three-story and basement, and will cost $25,000; also for Mr. H. J. Tilford, of Louisville, Ky., a three-story brick house in the colonial style, with red tile roof, to cost $18,000. It is to be built at the corner of Fourth and Wessinger avenues, Louisville.

The citizens of Kewanee, Ill., have subscribed $25,000 and purchased the ground for a company which proposes to erect, at once, a rolling-mill and pipe-mill, for the manufacture of bar iron and wrought iron, steam and gas pipe. The ground selected comprises five acres adjoining the well-known Haxtun Steam Heater Works, which will be operated in connection with the new plant.

Architect George S. Spohr has, during the week, let the contracts for the following work: Two houses for Dr. Case, two-story and basement, 44 by 56 feet, on Seminary avenue, near Webster avenue, to cost $6,000; house for James Sullivan, at the north-east corner of Wells and Whiting, 30 by 50 feet, to cost $7,000; three-story and basement store and flats above for Sullivan Bros., at the corner of Franklin and Superior streets, 22 by 52 feet, to cost $6,000.

Mr. M. L. Beers, architect, is building an apartment house between Indiana and Michigan avenues, on Twenty-first street 34 by 50 feet, of pressed brick; cost, $12,000. Also factory on Indiana street, near Kingsbury, four-story and basement, for H. A. Streetor, Globe Iron Works. It is built of pressed brick, 60 by 75 feet, and will cost $10,000. Mr. Beers is also building a handsome residence at Woodlawn for F. W. Green, Esq. It is a frame building, to cost $4,000.

Architect S. S. Beman has designed for Gen. Stager, John Doane, Sec. of War Lincoln and others, a club-house to be built on a beautiful Canadian lake as a fishing headquarters. The general design is Queen Anne. Mr. Beman is also constructing the Chicago Normal Training School, corner Twelfth street and Michigan avenue. It will be built of brick four stories high and will cost $50,000, also making important changes in the construction of Gen. Stager's residence that will cost $25,000; also a new freight house at Pullman is projected, costing $150,000. It will be 800 by 180 feet.

Among the medals awarded to competitors at the Railway Exposition, the drawing materials, surveying instruments and engineers' instruments sent by Messrs. Keuffel & Esser, of New York, were distinguished; this house receiving, "for best display of surveyors' instruments, a gold medal; "for best drawing table, a bronze medal; for best set of engineers' railway curves, bronze medal; for best leveling-rod, bronze medal. This house, so popular with architectural draughtsmen and engineers, it is worthy to note, received the only gold medal awarded to any exhibitor of engineering, surveying or drawing materials, and their exhibit is to the drawing fraternity one of the most pleasant remembrances of the Exposition.

Architects Burnham & Root are doing a large amount of work for the Chicago, Burlington & Quincy Railway Company this year. In addition to the completed office building in Chicago, they are constructing a depot at Galesburgh, Ill., 200 by 150 feet, a depot at Des Moines, 100 by 50 feet, and a building at Creston, Iowa, to be used as a general library and reading-room for the employés of the road, and to contain the library of the officers as well. These buildings will be of pressed brick with stone trimmings and terra-cotta ornamentation. An elegant residence for J. W. Brooks has been designed by this firm to be located on North State street. It will be of stone and tiles, 40 by 65 feet.

Architects Adler & Sullivan are building for Richard Knisely a block of stores on West Lake street, near Hoyne. They are 35 by 75 feet, each three stories high. The contract for the entire carpentry is in the hands of T. C. Goudie, contractor. The cost will be $15,000. Messrs. Adler & Sullivan also have underway, residence on Belden avenue, near Clark, for Mrs. Ann Halstead, to cost $15,000; block of flats, corner Twenty-Second and Indiana avenue, for M. M. Rothchilds; cost, $20,000; stores and flats on Lincoln, near Belden avenue, for F. Kaufmann; cost, $10,000. The foundations of the linseed oil works of Messrs. Wright & Lauther are commenced at the corner of Polk street and the railroad track. The building will cost $40,000.

Architect J. M. Van Osdell has designed two houses for S. D. Stanbro, on Ashland avenue, near Congress, 20 by 70 each. Dining-room and kitchen on the main floor. Anderson pressed brick front, trimmed with brown stone and terra-cotta. Cost of the two, $18,000. House for John Spry, corner Monroe and Loomis; Anderson pressed brick, trimmed with brown stone; first floor fitted in hardwood, 31 by 76; cost, $25,000. House for B. L. Crumb, corner of Leavitt and Adams streets, 25 by 46; two-story and basement; brown stone front; cost, $7,000. Flat for E. H. Gammon, Monroe, near Morgan, 25 by 80; three-story and cellar; Bedford-stone front; cost, $10,000. Manufacturing building for Jesse Holladay; runs through from Milwaukee avenue to Clinton street; cost, $10,000.

Messrs. Bauer & Hill let contracts for a new schoolhouse to be erected for the Rev. Thomas Burke at the corner of Rumsey, near Indiana street. The structure will be 85½ by 73 feet, and three stories and basement in height, and will be of pressed brick with stone trimmings. It will be connected with the vestry of St. Columbkill's church by a covered passage-way. Special attention will be paid to ventilation, the system used so successfully by Mr. Bauer in the public schools of the city having been adopted. Adjoining the school will be a boiler-house, from which will be supplied the heat for both the school and the church. When completed the structure will cost $40,000. J. M. Dunphy is the contractor, T. Menard, carpenter.

Architect G. H. Edbrook has prepared plans for a large insane asylum, to be built in the State of Wisconsin by an association of which Dr. Henry Palmer, of Janesville, Wis., is president; Julius Schnering, of Chicago, is vice-president; Hugh Heron, of Chicago, treasurer, and Dr. Oscar A. King, of Chicago, is secretary. The buildings will cost $125,000, and the work of construction will begin as soon as a suitable location can be obtained, which will probably be at Janesville, Wisconsin. Also a residence for C. H. Knight, of Englewood, at Harvard and Sixty-fourth streets. The design is quite elaborate and the building when finished will cost about $10,000. Also residences for J. R. Putnam, on Harvard street, Englewood, $5,000; J. H. DeLuce, at Ravenswood, $3,500; Wm. H. Powell, on Powell avenue, Jefferson, brick, $6,000.

A drygoods firm on State street, who are making extensive improvements in their building, have in process of construction for their elevators some of the finest brasswork ever made in Chicago. The design is to inclose the shaft for two stories in polished brass. The doors are handsomely designed with the upper panel of square meshes of flat brass, while the lower is a succession of ornamented rods and a small panel in the center with the monogram of the firm or a spray and birds; all elegantly finished. The flat meshwork continues up the shaft. The elevators are two in number, and this brasswork gives an effect that is as beautiful as it is unique and original. The brasswork is in the hands of L. S. Baldwin & Co., and in its entirety is probably the most expensive as well as the best executed piece of brass manipulation that has been turned out in the West, not excepting the elegant brass accessories ordered for the Tabor Opera House at Denver.

Messrs. Bauer & Hill have let contract for Panorama building, corner of Wabash avenue and Hubbard court, for Mr. Eugene Davids, of Brussels, Belgium. This building is to be similar to one constructed in London, Paris, Berlin, St. Petersburg, and also one which was erected in New York last year. In plan it is sixteen-sided and 130 feet in diameter. The walls are fifty feet ten inches high, roof dome-shaped. The constructive part of the building is entirely of wrought iron. Iron pillars being anchored to the foundations of the piers run to the roof and continue in arched ribs to a center ring-piece, which supports a ventilating cupola. The surrounding walls are to be entirely of brick, ornamented with galvanized belt courses and cornices. The entrance pavilion, which is one story in height, and contains the vestibule, ticket-office and general office, is directly on the corner, from which a double passage leads to the center of the building, terminating in a spiral stairway leading to a platform forty feet in diameter and elevated thirty feet above the grade. From this platform the spectator will view what is known in history as the battle of Gettysburg; it will be as true to life as it possibly can be made, and a spectator will not realize that he is inside of a building, but will think he is standing in the center of the battle-field, and see the fighting in all its horrible details and grandeur. This being accomplished by an immense painting on canvas 400 feet long and forty-five feet high. The cost of this building will be at least $40,000. During the day light will be admitted by a ring of glass around the roof lines. At night it will be lighted throughout by electricity. In all other cities it has proved a great success, and cannot help being so in Chicago.

Lumber Notes.

FRENCH and German timber merchants are sending orders to this country for first-class walnut logs faster than they can be filled.

FLORIDA lumber is in good demand in England. A line of steamships has been established between Fernandino and Liverpool in this branch of trade.

A DESTRUCTIVE insect is killing the pine-trees in some sections of Arkansas, the larvæ eating the foliage. It is a false caterpillar, the progeny of a saw-fly.

PHILADELPHIA capitalists have organized a stock company entitled the Columbia River Lumbering Company, for the purpose of cutting fir timber in Washington Territory for the eastern markets.

SOME conception of where all the lumber and timber produced in the United States goes to is gained when it is learned there is 1,200,000,000 feet rolling around the country in the single item of railroad cars.

IN boring an artesian well in San Bernardino, California, a tree which stands perpendicularly was encountered at the depth of 280 feet. Great pieces of the wood, which appears to be sycamore, are brought up in the pipes.

A PARTY of Michigan land owners have purchased 56,000 acres, and Iowa parties 16,000 acres of land lying in Escumbia, Conecuh and Crenshaw counties, Alabama. Sawmills will be erected and the lumber shipped north for sale.

IT is said that no forests in America compare with those of North Carolina in variety and luxuriance of growth. The state contains almost 40,000 miles of unbroken forests, containing all the best known species to be found in this country. Of the twenty-two species of oaks that grow east of the Rocky mountains, nineteen grow in North Carolina.

THE *Lumberman's Gazette*, Bay City, Michigan, says: Cedar is one of the woods that many pine operators are holding in reserve. On one stream in Michigan a large sawmill concern owns a large body of cedar, but they will not sell a stick of it, and at present have no occasion to cut it themselves. They think it is good property to hold on to, considering it cost them but little, and undoubtedly they are right. When the company's pine is exhausted the cedar will come in play. This is but one of many similar cases.

Art Notes.

A SPANISH grandee has an entire bedroom suite of furniture made of glass.

THE Museum of Fine Arts at Boston will hold an exhibition of paintings and sculpture by American artists, at home and abroad, from the 16th of October to the 27th of November.

THE Belgian Central Society of Architecture are organizing a national exhibition of architecture, comprising the works of past and contemporary architects. The exhibition will be opened on the 2d of September next in the Palace of the Fine Arts in Brussels.—*The Artist.*

C. J. JORGENSEN and Alex Kluge are credited with the artistic arrangement and placing of the Lincrusta-Walton decoration of the J. J. McGrath exhibit at the late exposition. The work displayed decided artistic talent, and a silver medal was awarded to Lincrusta-Walton as a decorative material, indicating the opinion of competent judges upon its decorative qualities.

A LIFELIKE picture, and one that possesses unusual artistic merit, has been recently finished of Chicago's veteran architect, John M. Van Osdel. The painter is the gentleman's niece, Miss Libbie Van Osdel, a lady but nineteen years of age. The painting, in its skillful drawing, correctness of outline and accuracy in effect of light and shade, as well as in the arrangement of color, is worthy of a place beside the best our artists have produced. We certainly hope to see it occupying an honored place in the art gallery at the fall exposition.

IN speaking of a small exhibition of water-color drawings by American artists, recently opened at the Egyptian Hall in London, *The Artist* gives a just and kindly criticism upon American water-colors. "These drawings, in number about a hundred, have been specially selected by Mr. H. S. Philpot during a residence in America, and have been brought by him to this country. Such a collection—supplemented, too, as this one is, by a number of etchings by leading American etchers—is of much interest, for it introduces us to a school of painting with which few people in this island are acquainted. The most prominent characteristic of all the work shown, and one which cannot fail to strike visitors to the exhibition, is the strong bias toward French technique and French color displayed by most of the artists represented. This tendency is very well shown in the productions of the Moran family. Such pictures as 'Apple Blossoms,' by Leon Moran, or 'The Pets' and 'Reflections,' by Percy Moran, owe, evidently, their entire inspiration, if not their very existence, to the careful study of French models, possibly to actual French tuition. With much of the cleverness and technical facility, the deftness and readiness of hand which give a charm to the work of the best aquarellists, they have at the same time the crude and metallic style of color which seems for some reason to characterise all water-colors produced under French influence. The same criticism applies to the 'Tête-à-Tête' of F. S. Church; a picture, however, not without a strong infusion of transatlantic spirit. Agreeable enough work is also here by R. W. Van Boskerck, M. F. de Haas, J. F. Murphy, R. M. Shurtleff and C. D. Weldon. The etchings are interesting and include specimens from studios of such artists as Stephen Parrish, Thomas Moran, M. N. Moran, A. F. Bellows and Charles Volkmar."

Hydraulic Pressed Brick.

OUR St. Louis correspondent sends the following interesting details regarding probably the largest manufactory of brick in the country, the works of the St. Louis Hydraulic Pressed Brick Company.

The company has four yards, employ 560 men and 250 mules—working ten hours per day and ten months of the year. The capacity of each yard is 45,000 brick each day, and the total output last year was 42,000,000. The company are also largely interested in the "Union Pressed Brick Works," which turned out 20,000,000 brick last year; the two concerns furnishing over one-half the consumption of brick in St. Louis, besides shipping largely to Canada, Texas, Salt Lake City and intermediate points.

The brick at the Hydraulic Company's yards are manufactured by the following process: The clay is first ploughed, rolled and pulverized at the clayfield, and then drawn to large sheds at the yard, 350 by 68 feet area, which afford storage-room sufficient to make 24,000,000 brick. The clay is delivered from these sheds by a tramway, in small cars, to the machines for grinding, where it is thrown into a large hopper and pulverized, and from thence conveyed by elevators, in the same manner grain is carried in a grist-mill, to the brick machine. If face brick are to be made, the clay is put through a "picker," from whence it passes to another hopper, and from that fed to the machine by a "charger." All the brick machines used by the company are the Ethen Rogers' dry clay patent, which the company controls in the United States.

When the clay leaves the charger, which works automatically and carries enough to make ten brick at a time, it passes into the moulding machine, where it undergoes a pressure of from 300 to 800 tons, depending on the moisture in and quality of the clay. Ten bricks are made at each revolution of the machine, which has a speed of eight revolutions per minute. All power is furnished by hydraulic pumps, driven by an engine of sixty-horse power, which runs two machines. A gauge shows just what pressure is being used, and the machine is under the complete control of the engineer, who can stop it in any position and at any instant. A register to each machine, similar to that on a printing-press, counts the brick as they are made. Fifteen men are required at each machine, and the brick are drawn by carts directly from the machine to the kilns, which are an invention of Mr. W. N. Graves, the superintendent, and known as the "New Patent Duplex Kiln." There are four of them. Each kiln is 37½ by 28 feet from out to out—interior height, 14 feet. They are fired in the same way as common kilns, but have flues running from each side to the center, both over top and bottom—the top heat running down and the bottom heat running up, meeting in the center, hence the name "duplex," or double. This affords an uniform temperature throughout the kiln, and gives a better grade of brick to the burning, as instanced by the product of two of the kilns a few days ago, viz: 91,000 each, of which 86,000 from the first were the highest grade, and the second 87,000, the balance being "common," and all fit for building. There were only about 300 "salmon" or soft brick to each kiln. While the common kiln lasts but five years, Mr. Graves alleges his kiln is good for twelve or fifteen years without repair. Illinois soft coal is used by the company with their kilns, and the daily consumption is about six carloads, or 2,400 bushels per day.

Superintendent Graves has made a successful attempt in enameled brick, but has only as yet perfected the work so far as to meet small orders. The fancy brick are made by a shaving process, and done by hand—one man making about 400 per day.

A Unique Fire Escape.

A UNIQUE and practical device is known as the "W.S. Patent Folding Fire Escape," which, when not in use, folds up so as to appear like a "leader" running up a building, or, in the case of new buildings fitted specially by "sinks" in the wall for it, out of noticeable sight; in both cases avoiding deformity to the building on which it is placed. Its most noticeable features, outside of its quality as a fire-escape, are, in case of fire, by electric bells on each floor, it sounds the alarm to the inmates, and at the same time sends instant signal of the locality to the fire department. Of course this is not the class of fire-escapes burglars appreciate, as it is sure to alarm both inmates and police. It is operated as easily as a bellpull from within and without the premises — from without by a policeman, fireman or any person who may have access to a key to a fire telegraph box, which guards the method of its simple operation.

THE Consumers' Gas-Light and Fuel Company of Chicago have their main works well under way and are rapidly laying their pipes. They are about to erect works in Lake View and promise to furnish gas to consumers by January 1.

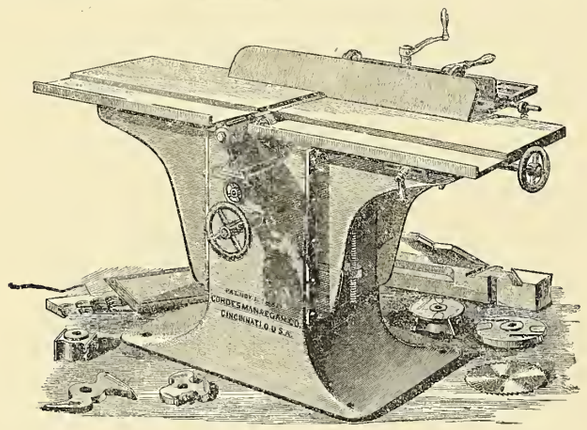
PUBLISHERS' DEPARTMENT.

Mahogany Imitation.

ON PINE AND ALL OTHER WOODS.

One of the most practical and beautiful pieces of work in artistic finish of wood has lately been called to our attention in the new residence of W. P. Rodgers, near the California avenue entrance to Douglas park, namely the finishing of the pine woodwork in old and new mahogany by an artificial process, which gives a perfect imitation of the natural wood itself. This process is a discovery of Mr. T. S. Prescott, late of New York city, and now of Chicago—236 East Lake street. These remarkable effects are produced by the application of water-colors, which act as a "filling" to the wood, and is completed by coatings of Berry Bros'. oil finish, which the inventor claims to be better for the purpose than any other manufactured. This process is not graining, but is the application of two tints—one of the shade of old and the other the shade of new mahogany—by the means of a brush as paint is applied. These tints penetrate the surface of the wood like a stain, yet in such a manner that not only is the natural grain of the pine preserved intact, but is more fully brought out. The beauty of the work, which surpasses any graining, and is much more durable, commends itself to architects and builders especially, as it is said to be comparatively inexpensive.

We learn, in addition to Mr. Rodgers' residence, the store of Messrs. Tramel & Co., 198 East Lake street, has been finished in the same style.



Improved Universal Woodworker.

Our readers will find on this page a cut of a new and improved Universal Woodworker, manufactured by the Cordesman & Egan Company, of Cincinnati, Ohio, who took the first premium (a silver medal) on it at the last Cincinnati industrial exposition, over all competitors. The point on which the greatest stress is laid is the connected and movable bearings (patented by this company) by which the operator, after he has adjusted the angle of his fence, makes the exact lateral adjustment by setting the head and spindle over without again touching the fence. Practical men will see the advantage of this in the large amount of valuable time saved over the usual way of doing this work. The aim has been to make a strong, simple and reliable machine combining all the adjustments necessary for doing work economically, and it would seem, from what purchasers say, that they have succeeded admirably. For prices of this and any other woodworking machinery address the company at 226 to 246 West Front street, Cincinnati, Ohio.

Building Permits.

The following permits for buildings to cost $2,000 and over have been issued since June 20, 1883:

D. Weaver, two two-story dwellings, 37 by 64, on Adams near Oakley street $8,000
Decker & Hulbert, five two-story dwellings, 100 by 64, on Adams near Oakley street 20,000
W. E. Wiegle, one-story market building, 50 by 160, 191 and 193 Canal street 10,000
C. J. Vanzandt, two-story flats, 22 by 74, on Thirty-sixth street, near Wabash avenue 6,000
Matthew Franzen, three-story flats, 21 by 61, 41 Lincoln place 5,000
Mrs. E. C. Wright, three-story flats, 25 by 70, on Park place near Franklin street 9,000
Mrs. W. Wells, three-story store and flats, 30 by 70, corner Indiana avenue and Noble street 8,000
S. Westainiez, one-story addition. 20 by 74, 550 Noble street 2,000
D. A. Walsh, two-story flats, 40 by 52, 2632 Fifth avenue 10,000
J. H. Kedzie, basement, 40 by 36, 182 and 184 Park avenue 2,500
Mrs. E. J. Moore, four three-story flats, 100 by 70, 371 and 373 Indiana street 28,000
John Ehlert, three-story store and flats, 23 by 66, 2131 Cottage Grove avenue 6,500
T. H. Curtis, three two-story dwellings, 60 by 31, 153 to 157 Twenty-fifth street 7,500
C. A. Lange, two-story dwelling, 22 by 50, 441 Congress street 4,000
W. F. Burbank, two-story dwelling, 24 by 50, 315 Flournoy street 3,000
Stegman & Spory, two-story dwelling, 21 by 56, 3140 Dearborn street 3,000
John Downey, three-story dwelling, 24 by 108, 322 Harrison street 11,000
Chas. Heineman, two-story dwelling, 23 by 61, Hurlbut street, north of Belden avenue 5,000
M. M. Rothchild, three two-story dwellings, 50 by 65, 3203 Indiana avenue 15,000
Thos. L. Grenier, nine one-story stores, 297 by 32, corner Throop and Madison streets 20,000
J. F. Errickson, two-story dwelling, 21 by 45, 210 Laughton street 2,200
M. Hagerty, two-story dwelling, 24 by 46, 198 Polk street 3,500
A. B. Johnson, four-story warehouse, 42 by 120, 551 to 555 North Green street 12,000
P. Abrahamson, two-story dwelling, 21 by 45, 208 Laughton street 2,000
M. F. Shurr, two-story dwelling, 21 by 48, 687 Erie street 2,500
John Bauer, two-story dwelling, 24 by 63, 401 Indiana street 3,500
Western Refrigerator Company, six-story refrigerator, 50 by 100, 231 and 233 Michigan street 20,000
George Auer, two-story dwelling, 22 by 48, 146 Johnson street 3,500
Eugene Davids, iron panorama building, circular radius 65 feet, height 50 feet, corner of Wabash avenue and Hubbard court 35,000
R. M. Eddy, four-story machine shop and foundry, 40 by 60, 45 to 53 Indiana street 16,000
Jacob Kaller, two-story dwelling, 21 by 50, 39 Heine street 3,000
Dr. Adelbert Taggart, two-story dwelling, 30 by 70, 805 Monroe street 8,000
John Irwin, two-story addition, 43 by 104, 640 and 642 Madison street 12,000
C. E. Dinehardt, five one and-a-half-story cottages, 21 by 32 feet each, on Dudley near Augusta street 10,000
F. Pleur, two-story dwelling, 22 by 58, 211 Blackhawk street 3,000
M. Quinn, two-story dwelling, 22 by 44, 395 Maxwell street 2,500
James Johnston, one-story cottage, 22 by 34, 1182 West Adams street 1,000
Wm. Bishop, two-story dwelling, 22 by 40, 887 Washington street 4,500
Dr. Case, two-story flats, 44 by 56, on Seminary avenue near Webster avenue 5,500
P. M. Peterson, three-story flats, 23 by 51, 181 North May street 4,000
Blair & Railton, two two-story barns, 50 by 35, corner Cass street and Chicago avenue 5,000
J. T. Dale, two three-story dwellings, 40 by 66, 3513 and 3545 Prairie avenue 11,000
Alexander Watson, two-story dwelling, 21 by 50, on Superior street near Paulina 3,000
Wm. Hughes, two-story dwelling, 20 by 52, corner Thirty-sixth street and Indian avenue 6,000
E. A. Otis, three-story store and dwelling, 60 by 38, 834 and 836 West Madison street 12,000
A. Barnett, two-story dwelling, 21 by 44, 261 Hoyne avenue 2,500
Beruard Boddeker. three-story store, 21 by 71, 535 Chicago avenue 4,300
Henry Hageman, two-story dwelling, 20 by 36, 424 North Lincoln street. 2,000
Joseph Fleishmann, three-story dwelling, 28 by 73, 483 Dearborn avenue. 10,000
D. Harry Hammer, three-story stores and flats, 50 by 64, 3718 and 3720 State street 15,000
A. E. Wood, two-story flats, 22 by 56, 287 Idaho street 3,000
Eich Bros., five two-story dwellings, 98 by 50, from 1059 to 1067 Wilcox avenue 15,000
John Kenney, two-story store and dwelling, 22 by 64, 687 Fourteenth street 4,000
John Cordano, three-story flats, 22 by 56, 104 South Center avenue 5,000
John Baus, two-story addition and brick basement, 20 by 15, 949 North Halsted street 2,000
C. Le Beau, three-story flats, 22 by 50, 12, 14 and 16 Gold street 6,000
O. J. Franchere, three-story store and dwelling, 24 by 51, 316 Blue Island avenue 10,000
John Ford, two-story store and dwelling, 23 by 60, 149 Fullerton avenue. 3,200
George W. Bohanon, three-story factory, 40 by 80, 461 Wabash avenue 15,000
Peter Faust, two-story dwelling, 22 by 48, 12 Evans court 3,000
W. C. Ashton, two three-story dwellings, 30 by 60, Oak street near Lake Shore drive 3,000
Joseph Wahl, two three story dwellings, 50 by 75, Chicago avenue, east of Rucker street 10,000
John Woelke, three-story store and flats, 27 by 66, 89 Wells street 9,000
B. and P. Mahon, three-story flats, 25 by 56, 2716 Dearborn street 5,500
S. Gregstein, three-story front addition, 40 by 16, to flats 1804 and 1806 Wabash avenue 4,000
George F. Whidden, two two-story flats, 42 by 55, 66 and 68 St. John's place 4,000
George F. Whidden, two-story flats, 42 by 58, 64 aud 70 St. John's place 5,000
J. B. Barry, three-story dwelling, 24 by 64, 237 Park avenue 7,000
A. F. Ewing, six two-story dwellings, 120 by 34, on Thirteenth place between Oakley and Leavitt street 12,000
A. T. Ewing, six two-story dwellings, 120 by 34, on Thirteenth place, between Oakley and Leavitt street 12,000
Grace Episcopal Church, one-story church, 30 by 60, on Girard street near Wabansia avenue 3,000
Charles Schumacher, three-story flats, 22 by 55, 367 South Morgan street. 4,000
J. M. Allen, eleven one-story cottages, 20 by 28, on Armitage, between Elk Grove and Girard streets 8,000
Charles Wilkie, two-story dwelling, 21 by 44, 740 Dixon street 2,000
Thomas Olson, three-story flats, 45 by 55, 346 West Erie street 10,000
John Hubka, two story flats, 22 by 70, 79 Wade street 4,500
Rev. S. Merretti, three-story rectory, 25 by 50, 64 Illinois street 6,600
C. H. Blair, two two-story dwellings, 46 by 74, 2909 and 2911 Prairie avenue 17,000
Dennis S. Sherman, two-story dwelling, 21 by 65, 48 Sloan street 4,500
O. Juul, two-story dwelling, 22 by 50, 219 West Erie street 4,000
Peter Smith, two-story dwelling and store, 24 by 60, 3637 Halsted street 4,300
Thomas Sweda, three-story store and flats, 88 by 44, 590 North Ashland avenue 6,500
S. F. Artingstall, two-story dwelling, 21 by 54, on Hamilton avenue near Monroe street 4,500
James Kincade, two two-story dwellings, 46 by 51, rear of 594 and 596 South Halsted street 4,100
J. M. Stemben, four-story store and flats, 25 by 80, 56 West Indiana street 8,000
John Olouski, two story flats, 22 by 62, 718 Noble street 3,600
T. P. and P. J. Sullivan, three-story stores and flats, 22 by 52, corner Franklin and Superior streets 4,500
Frank Newak, two one-story cottages, 20 by 30, 757 and 759 West Seventeenth street 2,000
W. Atkins, two two-story dwellings, 43 by 52, 180 and 182 Maxwell street. 6,500
John Ryan, two-story dwelling, 25 by 39, 3150 Indiana avenue 5,000
Thomas Dunne, two-story dwelling, 23 by 50, 408 South Morgan street 3,400
John Ryan, two-story and basement brick dwelling, 25 by 39 5,000
Wm. Atkins, two-story and basement brick dwelling, 43 by 52 6,500
T. H. Gault, four two-story and basement brick dwellings, 20 by 47 12,000
Eich Bros., three two-story brick dwellings, 20 by 50 9,000
Eich Bros., three two-story brick dwellings, 20 by 55 9,000
Jas. Sullivan, three-story and basement brick dwelling, 30 by 50 4,100
Theo. Hoffmeier, two-story and basement brick dwelling, 25 by 30 2,900
U. P. Smith, two-story brick dwelling, 26 by 47 6,000
U. P. Smith, two-story brick dwelling, 20 by 47 6,000
U. P. Smith, two two-story brick dwellings, 26 by 47 12,000
L. K. Smith, two-story and basement brick dwelling, 50 by 70 30,000
Chas. Hottinger, four-story brick flats, 33 by 58 15,000
Fred Knuil, two story brick flats, 22 by 60 2,500
Wm. Schroder, two-story brick dwelling, 22 by 70 5,000
G. Thompson, two-story brick dwelling, 21 by 46 3,000
Wm. Moore, one-story and basement brick cottage, 20 by 30 2,000
Ellen Lynch, two-story brick dwelling, 22 by 44 2,600
W. A. Fuller, additional story, 80 by 85 18,000
C. DeLuce, two-story and basement brick dwelling, 24 by 60 5,000
Wm. Jackson, three tbree-story brick dwellings, 50 by 56 10,000
E. Saltsman, two-story brick dwelling, 23 by 60 6,000
D. A. Titcomb, two two-story brick dwellings, 48 by 57 6,000
Geo. Righeimer, three-story and basement brick store and flats, 23 by 77. 7,500

THE INLAND ARCHITECT AND BUILDER.

Vol. II. No. 1

AUGUST, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

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L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

SUBSCRIBERS SWINDLED.

Numerous letters have come to us from New York, Boston, Baltimore, Philadelphia, Albany, St. Louis and other points complaining that the writers had subscribed for THE INLAND ARCHITECT AND BUILDER and not received it. Investigation shows that a swindler named W. H. Gault has been personating in the east R. C. McLean, editor of this paper, and he has harvested a large number of subscriptions. Gault is rather under medium height, has light complexion, and a peculiar, one-sided appearance of the mouth. In St. Louis a number of subscriptions have been taken by a fraud signing himself W. H. Barker, agent. He is described as being about forty-five or fifty years old, some six feet tall, and with grayish hair and beard, and a smart talker. These men are impostors, and are wholly unauthorized to represent us in any way. Subscribers should insist on canvassers showing satisfactory credentials from this office or from responsible subscription or news companies. If circumstances are suspicious, sent subscription direct to this office.

THE reader's attention is directed to the improvements in the typographical appearance of this issue of THE INLAND ARCHITECT AND BUILDER. The new heading which graces the first page was designed by the well-known architectural artist Paul C. Lautrup. It will be noticed that the type or dress of the journal has been changed throughout from a modern to an antique style which is unexcelled for beauty and clearness. Another noticeable improvement is the leaving out of all column rules in the reading pages. While these changes have been made to please the eye, improvements in the contents have not been overlooked. A greater variety of architectural information is given, and the managers have inaugurated a system by which they are confident of obtaining very full building news in the West. In the future prominence shall be given to illustrations of exterior and interior details, of which the page of "Fragments from Chicago Architecture" in this issue is an example. No efforts shall be spared to make this journal of the highest excellence in all departments. The subscription price will hereafter be $1.75 per year, and those who know anything of the expense involved in a publication of the quality of THE INLAND ARCHITECT AND BUILDER will need no explanation of this advance in price. The improvements that the managers are encouraged to make are sufficient evidences of the prosperity of this journal and of the kindly reception it has been accorded by the building fraternity of the West.

THE committee assigned to investigate the charges of corruption and incompetency in the Supervising Architect's office at Washington has finally closed its sessions. Whatever may be the verdict of those who have followed the proceedings as to whether Mr. Murch and his coadjutors have sustained the allegations made or not, and whatever may be the report of the committee, one thing, we think, has been clearly shown: the time is ripe for a change in the method of procuring the public buildings of the Government. Under the present system, where one man, with unrestricted powers, in the matter of planning, constructing and supervising, who may change, at will, plans and specifications after contracts have been made, and is the sole arbiter as to the compensation resultant from such changes, makes possible all that has been charged against this office and is fruitful of such miserable edifices as have already been thrust upon the Government at prices that might have "ransomed a principality." What will be admitted is, that the Government is entitled to the best possible architecture, and this, we hold, can only be attained through a competitive system that would throw all Government work open to the genius and experience of the architects and builders of the country, and in this way, by exciting professional emulation and pride, insuring, not only a more symmetrical and better class of buildings, but cheaper ones, such as would be an architectural credit to the nation. Undoubtedly the result of this investigation will be the bringing of the subject before Congress; and it is to be hoped among the first enactments of the next session will be one that will abolish this office, which is of questionable legality at best, and has assumed powers that makes the title an anomaly. We have in previous issues expressed our views in regard to the matter, and have had no occasion to change them. We are not in accord with those who, seeing the necessity of a change, would have the "place" retained and hedged about with legislated restrictions, as we are fully convinced the responsibility of so important a matter as the construction of

the Government buildings should be as far removed as possible from partisan influences, and as yet we have been unable to discern a better place to assign the *supervision* of the Government architecture than where we have heretofore suggested, the War Department, *i. e.*, to the corps of Topographical Engineers which has already furnished evidence of its fitness for the duty, and which has now under its jurisdiction the supervision of nearly every other responsible Government work.

CONSIDERABLE credit is due the government of Canada for the manner in which public building is conducted, and this in extremely favorable contrast to the system of conducting government architectural affairs in the United States. There the architect is engaged by the commissioner of public works, and he is not a political appointee, but is engaged by the government as by a private party, upon his professional merit alone. There the contracts are, as a rule, awarded to the local contractors, and such is the government supervision that if a contractor cannot fill his contract it is taken out of his hands and placed where it can be filled before the work has stopped, and a long bill of increased expense and extras is incurred. An instance of this is furnished in the construction of the Custom House and Postoffice at Hamilton. A certain firm received the contract to furnish stone, but the quarries being inspected, it was found that enough stone could not be furnished from them of a uniform grade to complete so large a structure, and the contract was at once taken from their hands by the Board of Public Works and placed where they knew the quarries contained an adequate supply. The result of this careful supervision and inspection is, that the architecture of the government buildings is of a high order, architectural scandals are rare, and the people's money is not squandered!

IN directing attention to the national convention of the American Institute of Architects, to be held at the cities of Providence and Newport, Rhode Island, August 29, 30 and 31, we would like to impress upon the members of the association in the West the importance of this convention not only to them, but to the craft in general. According to the circular of the secretary an important amendment will be submitted, increasing the fellowship from seventy to one hundred, and also an amendment providing that the number necessary to form a chapter, instead of three fellows, as now, shall be one fellow and two associates, matters in which every member is interested. Beside the general advantage of meeting together and the interchange of ideas, the trip will be a pleasant one, giving to the visitor a breath of sea-air, and a change from the confinement and worries of the busy office to the life and holiday attire of a famous summer resort. Go, gentlemen, it will do you good, and will do much to perpetuate the fraternal feeling between you as members of an honored association, and prove your membership to be an active one.

THE proposed International Exposition to be held at Nice is possessed of a double attraction to English and Americans. It will introduce their products into the south of Europe, and give to the exhibitors a few months of rest in one of the loveliest of European winter resorts. "All Europe" goes to Nice from November to February, and as an organization mingling pleasure with the more practical competition of manufactures, this exposition promises to be universally popular. A recent letter from the secretary informs us that applications for space from the United States will be received up to September 15, and goods up to November 1, with fifteen days additional in the event of unavoidable delay. Mr. Leonard F. Beckwith, 229 Broadway, New York, is president of the committee of organization for the United States, and Architect W. L. B. Jenney, of Chicago, is deputed to act for the organization of the adjacent West.

OF all the formidable strikes among employés that have of recent years been inflicted on the country, none attained anything like the importance and mischievousness of the present telegraphers' strike. Other great strikes have been more or less local in character, and their effects were correspondingly circumscribed, but this one in its effect encompasses the entire country, interfering with every department of trade, and even encroaches upon the affairs of government itself. That there is a general sympathy among the public giving moral and pecuniary support to the strikers, a sympathy born of the encroachments of corporations and their regardlessness of the rights of the public, does not lessen the gravity of the situation, as he must be blind who cannot see from this expression of sentiment the conviction is growing among the masses that between capital and labor there is an antagonism of interests, and that labor and trade, to be secure, must be continually in arms and on the aggressive. Unless this sentiment, which is the forecast of future complications and social disorders, is corrected by healthful legislation, the outlook for the future is not inviting. In our judgment, the time is now ripe when this question of combinations and strikes should receive the earnest and active consideration of our wisest statesmen and legislators. Neither money kings, corporations, or any class of men, have the right to combine against the public good and threaten the foundations of government.

MEANWHILE the intelligent members of trades unions, especially those of the manufacturing and building trades that have seasons of activity and of depression, regulated by the season of the year and the demand for construction, should earnestly study, ponder and weigh the question of strikes. A strike means an organized riot, and like a riot has always more or less provocation, but are they wise? Do they, as they are conducted, bring the desired result, and whether the striker is victorious or not, is not the victory gained by the greater force, and does not the question itself remain as unsettled as before? Out of over 2,300 strikes in England only about seventy were successful, and that at not only untold cost to those engaged, but to the general public, and when by strikes a loss is entailed upon the community, does not a strike become also a moral wrong? If instead of stopping work and losing a part of a season, and therefore a certain amount of a year's income, would it not be better to try to the very last extremity to settle all differences by intelligent and honest arbitration? Instead of arraying capital and labor, the employer and the employé, one against the other, would it not be better to have a constant board or committee of arbitration appointed from among the most able and trustworthy of each, and abide by their settlement of all differences? It would take some patience, some moral courage sometimes, but would it not be better, and then families would not suffer, capital would not remain tied up and the arteries of trade unnaturally stagnated, but all manufacture, all construction would progress with the impetus given it by demand, and the workman be a gainer by having steady work while work is offered, and when that fails he will not be himself to blame for his enforced idleness. This is what the question will sooner or later have to come to, but if the sys-

tem of the past few years is persisted in, there lies between the present and that period strife and bloodshed, maybe, for the fruit of such ignorance and unreasoning presumption is violence.

THIS month's installment of the interesting course of lectures on architecture, by W. L. B. Jenney, architect, is unavoidably omitted from this issue, but will appear in our next number with profuse illustrations.

History of Chicago Architecture.

PART VI.

RECOLLECTIONS OF JOHN M. VAN OSDEL.

THE Canal Commissioners in 1847, in order to have a base line for their topographical surveys, established a point called low-water mark, and this was used as an imaginary horizontal plane underlying the entire city. This imaginary plane was adopted by the City Engineer as a base from which the grades of the streets were measured, and is now called "City Datum." It is about three feet below the present surface of the river, and fourteen feet below the curb grade of the sidewalks in the south division, from State street west to the river. But the present grade is much higher, and is a great improvement on the first grade, established in 1855. That grade contemplated a surface drainage of six inches in each block from Madison street north, and from State street west, to the river; making Water street eleven feet above city datum, Lake street eleven feet six inches, Randolph street twelve feet, Washington street twelve feet six inches, and Madison street thirteen feet. The present grade of Water street is three feet higher than it was before the great fire. The basements of the buildings on this street by the old grade could not be over five and one-half or six feet high. By the present grade they are made eight and one-half to nine feet. The former were comparatively useless, while the latter form very important parts of the business buildings on that street. Soon after the fire the Board of Public Works invited the writer and two other architects to a consultation regarding a new grade for the rebuilding of our city. There was no difficulty in elevating the streets to any desirable grade. The writer suggested that the grade of Michigan avenue be made fifteen feet above "datum," Wabash avenue fourteen and one-half feet, and all other parts of the south division fourteen feet, making the grade level from State street to the river. This plan was adopted and is now the city grade. There was another important improvement the writer wished to have adopted, and urged upon the attention of the Board, that was to make the summit of the streets at the crossings, and run the water from the intersections of the streets each way to the center of each block. This would require new catch-basins to receive the surface water and render those already in useless. It was admitted that it was very desirable, but as there was no appropriation for building new catch-basins, the matter was overruled and laid aside and the unsightly pit-holes and wooden bridges remain at every street corner in the city. It is a pleasure, however, to see that the South Park Commissioners have adopted the suggestion in the grading of the Michigan avenue boulevard. Any person who will notice the intersections of the cross streets of that avenue and compare them with the crossings of the streets in the business part of the city will appreciate the value of the suggestion. In the winter of 1844 the leading builders proposed to the writer that he open an architect's office, pledging themselves not to make any drawings, or construct any important building, without a plan. With this undertaking an office was opened, located on Clark street, between the City Hotel and the postoffice, occupying the site of the present Sherman House. No one had ever used an architect and it was difficult to convince proprietors of the necessity for such a branch of the builders' business. During the first year, however, a block of four four-story brick stores, twenty feet front each, and 130 feet deep, located on north side of Lake street, between Clark and Dearborn streets, were built from regular plans and specifications. The architect's fee was less than a hundred dollars, which the owners considered a very large price for such an ordinary picture. It should be remembered, however, that a dollar in those days had the purchasing power of three dollars of the present day. For instance, a man and wife could obtain board and pleasant room for six dollars per week.

Art of Pure Color.

BY JOHN W. ROOT.

WHAT will be accomplished in the street fronts of our houses will be more swiftly done upon the walls of our rooms. Here, being in his own castle, the householder is less timid about venting his emotions in color than he is where the passing critic may damn his house, like an ill-roasted egg, by calling it a "Dolly Varden." Here, as in the confidence of his own family, his pent-up emotions may overflow, and here artists may wield bold and vivid brushes.

In this matter of interior decoration we can easily foresee what may happen when we measure the distance which has been traversed in twenty years, from the alternate strips of green and French gray standing with deathly regularity, like sentries, about the room, to the last design by Morris or Tiffany, or from the yellow camel in the desert, who was forever dying in front of our father's fireplace, to the rugs of Daghestan or India.

In the development which we thus note we will see how much less salient has become boldly expressed form in design, and how much more study is bestowed upon pure color. Indeed, it frequently happens that in the most effective designs of wall-papers or stuffs there can scarcely be recognized a single precise form, and in the decorative painting of such artists as Tiffany and Lafage wall surfaces are made to glow with beautiful colors, based upon most vaguely expressed forms, as the stars in an evening sky suggest the beasts and men of a heavenly map.

In this closer study of the decorative value of pure color we are not apt to be led into gross manifestations of it; on the contrary, we may expect continually to meet with new and subtle refinements, not only in the adjustment of colors in one room, but in the relation established between various rooms. Primarily, we can conceive of an artist using pure crimson as a foil to pure greenish blue, or cobalt-blue as a complement to orange-yellow; but a nicer sense of harmony leads him to contrast yellow green with blue-green, or reddish brown with greenish bronze; or else to make gradations of tone from colors in their lower forms, as when mixed with black or diluted with white, to their primary conditions. We shall also find a new and finer sense of fitness in the coloring of each room, recognizing its functions and purpose and ministering to the spirit which best fits it.

In the drawing-room of a house, which is a rendezvous for brilliant companies, warm buffs, crimson, pure gold, and all the colors of brighter and more delicate quality, will be grouped. The hall will be more obviously and strongly painted in broad sweeps of reds, blues or warm browns, meeting the guest at entering like the assuring pressure of the hand and hearty accents of welcome which the host should give him.

In the library will be those effects least calculated to distract the mind or create mental unrest—the wall becoming a warm yet unobtrusive background to the soberly rich dresses of books. The dining-room becomes soft and rich in color, yet with a certain freshness and daintiness of tone like an appetizing dish from some "cordon-bleu." Each one of these various rooms is also enhanced in value by those which are seen with it, the color of each being studied in relation to the others as carefully as the colors on each separate room. In all this, however, the more highly cultivated the artist, or the Lorenzo who employs him, the more certainly will his study be directed, first, to the quality of color, and secondly to those forms which are best adapted to them. Unless, indeed, the fortunate patron should find some Michael Angelo or Tintoret whose thoughts are so great that he could be content to dwell forever in their presence. Failing this, he will not seek to cover his house with the expressed words of form as one might line a trunk with a newspaper, but rather to see that he lives in an atmosphere of such colors as best fit his life and emotional nature—which most refresh him after his day's labor or divert his moods into their best channels.

It cannot be denied that color is powerful in its influence upon the moods of the mind. Any one who has analyzed within himself the sensations produced by the contemplation of pure color will have found that this is not only true, but that each color has a certain tolerably well recognized effect.

Pure vermilion or yellow is exciting; deep blue soothing, and so on through the spectrum. Scientific observations, conducted with a view to ascertain something of the nature of these effects, have resulted in discovering a number of very important and suggestive facts. It is found that below the visible rays of the spectrum lie what are called "heat rays," that within the limits of the spectrum most heat is found in the red and yellow; that at the termination of the violet perceptible heat is lost, and after the spectrum ceases to be visible chemical rays are found. It has also been ascertained that rays of light have perceptible effect on different forms of animals who have no eyes, but who have at some spot a bunch of sensitive matter, which is always colored. Late experiments have shown that electric currents may be reversed by throwing upon the batteries where they originate, light from different colored lenses.

Certain effects of color on domestic animals (ruminants, fowls, etc.) are well known. It is only within a very few years that anything like systematic investigation has been made of color effects on men, but, as far as they have been made, it appears that they can be recognized and rudely predetermined.

In the case of certain lunatics, and other persons of deficient mental control, red and yellow was obviously excitant, blue and green soothing—as with those of us who are not lunatics; while all savage tribes manifest for red and yellow and for all brilliant and glittering things, a marked and passionate fondness.

Special Correspondence.

CLEVELAND.

CLEVELAND, Ohio, August 1, 1883.

Editor Inland Architect and Builder:

The following is a report of building news of this city as near complete as can be obtained at the hour of writing.

There has been considerable doing this summer, and some very fine buildings have been erected, a large number of them being frame; there are also some fine buildings of brick or stone, with wood trimmings, that are very imposing and handsome in appearance.

Mr. Levi I. Schofield is at work upon the postoffice, building a new extension on both south and north ends; also a pedimental portico on the Park front.

The south extension is all finished with the exception of the elevator, which will not be put in until the old part of the building is complete. This work will begin as soon as the office is removed to the south extension.

The papers of this city have for some time past been waging war against the architect and other parties connected with this building, treating them with the utmost disrespect, picking up information here and there, without even granting anyone interested in erecting the building the courtesy of an interview.

We learn from a reliable source that the south wing was up to the third story before the appropriation was made, also that in Washington it is considered that the work is going on as fast as it can be under the circumstances.

The indignation expressed by the local press is probably due to the "Hill investigation," which has created so much excitement in building circles.

BUILDING NOTES.

Architect J. M. Blackburn has the following business on hand: Brick veneered house on Wilson avenue, for Dr. Lewis, to cost about $60,000; block of stone-front houses on Prospect street, for G. Metzger, cost $24,000; remodeling and additions to E. Decker's photograph gallery, cost $7,000. Remodeling R. R. Root's house, at a cost of $5,000; two frame houses on Cedar avenue and two on Sibley street, for W. J. Price, each to cost $5,000; frame house and barn on Wilson avenue, for R. Arnold, to cost $6,000; frame house on Cass avenue, for G. H. Chandler, to cost $10,000; brick (manufacturing) building for Leader Sewing Machine Co., to cost $35,000; block of brick stores on Lorain street, for Jas. Wood, cost, $6,000; also a church at Elkhart, Indiana.

Messrs. Coburn & Blackburn are building a warehouse, 54 by 127 feet, six stories, to cost about $75,000, a Congregational church, of stone, said to be a fine structure, also a number of residences of brick, stone and frame.

Mr. A. Koehler is building the Park Opera House, facing the public square. The interior will be finished in the Moorish style, sparing no expense to make it a beautiful place of amusement, seating capacity of about 1,400 people.

Mr. Walter Blythe is remodeling the Standard block at an expense of at least $70,000, also building two dwellings on Woodland avenue, one on Logan street and one on Wilson avenue. Mr. B. also exhibits plans for two fine churches in the country.

Mr. A. M. Smith, architect, has on hand a brick business block, two stories, 24 by 35 feet, on Erie street, for Jas. Parker, cost $5,000; a residence on Wilson avenue, 46 by 83 feet, for A. L. Bassett, to be built of wood, two stories and attic, cost $12,000; a frame house, two stories, 35 by 72 feet, in Bedford, Ohio, to cost $4,600; a frame house at Elyria, Ohio, 24 by 60 feet, cost $4,000; also several tenement houses for which plans are not yet complete.

Prof. John Eisenmann, architect and engineer, has the West High School, corner Bridge and Randall streets, to cost $70,000 — it is 179 by 102 feet, two stories, tower 100 feet high, built of stock brick, with buff Amhurst stone trimmings; the Fowler school, corner Fowler and Hector streets, $60,000; the Buhrer school, in 13th ward, cost $27,000; the Dike school, in 15th ward, cost $27,000; the Dunham school, in 17th ward, cost $27,000; the Marion school, in 6th ward, cost $27,000; the Lincoln school, in 15th ward, cost $27,000; the Case School of Applied Science, $150,000; school for Lundville, Ohio, cost $25,000; a store for H. G. Sipher on Lorain street, Cleveland, cost $8,000; Zion Lutheran church at Monroe, Michigan, to cost $15,000.

The Co-operative Building Association are erecting a French flat building, 120 by 80 feet, nine stories high, for the heirs of the Stilman, Witt estate, to cost about $250,000. Mr. W. R. Thomas is the architect's superintendent.

Business has been very good this season, and workmen, especially bricklayers, have been in great demand, there being scarcely enough to fill the demand. Good prices have been paid for labor, and the city seems to be prospering.

F. S. H.

AKRON.

The following work is pending in the office of F. O. Weary:

Hotel Buchtel, 70 by 110 feet, six stories high, 120 rooms, pressed brick and stone, two elevators, electric light, all modern improvements	$100,000
Arcade Block, 120 feet front by 100 feet deep, four stories high, four stores, first floor, sixty office rooms above central court, 40 by 80 feet, pressed brick and stone, elevator, for Gen'l R. Alyn, of Detroit, and J. A. Kahler, of Akron	65,000
Business block, for Geo. Ayliffe, Mill street, 60 by 94 feet, three stories high, pressed brick and stone front	20,000
Business block for Akron Manufacturing Company, double stone, 60 by 100 feet, three stories high	12,000
Modern residence, Mr. H. Councill	13,000
Queen Anne residence, R. B. Walker	7,000
" " Thos. Bakewell, Salem, O.	8,000
Queen Anne pavilion at High Bridge Glens	5,000
City Hall, Canton, 60 by 105 feet, three stories high, pressed brick and stone	50,000

And at Canton an

Engine and market house	16,000
Three story stone front block, two stores, J. E. Meyer	18,000
Stone front block for Wm. Hassbold	8,000

A $40,000 high school, Zanesville, O., a $43,000 high school, Upper Sandusky, O., and a number of residences in outside towns.

ST. LOUIS.

ST. LOUIS, August 3, 1883.

Editor Inland Architect and Builder:

During the past two months the building business in all its branches has been very good.

Planing-mills, brick manufactories, etc., have heen scarcely able to fill orders. Building contractors seem to be very busy, and they report prospects for the future as very encouraging.

Several estimates on the U. S. Hospital at Hot Springs, Ark., have been sent to Washington by St. Louis builders.

Among the many edifices under process of construction or approaching completion are the following:

On Delmar avenue, Mr. Foster has approaching completion a fine residence of brick and stone. The style of architecture is Renaissance. Cost, $15,000.

Dr. Engleman is erecting a magnificent office, Garrison avenue and Locust street. Cost, $6,000. Besides these, Mr. H. W. Kirchner has also the supervision of a building for the State University at Columbia, Mo., which will cost $100,000.

Under the supervision of Mr. Furlong, Mr. D. K. Garrison has just completed a row of twelve two-story stone-front dwellings, with all modern improvements, on Page avenue, near Grand. The total cost will reach $60,000. Mr. J. J. Broderick is erecting two superb residences on the west side of Grand avenue, near St. Louis avenue. Cost, $15,000.

Messrs. J. B. McElfatrick & Son are superintending the erection of the Standard Theater; it is located on the northeast corner of Seventh and Walnut streets. It has a front on the latter street of 78 feet and a depth on the former of 138 feet. It will be three stories and basement in height. The floor of the first story is five feet above the sidewalk. The front and west side will be of pressed brick, with stone and galvanized iron trimmings.

The main entrance is on Walnut street, through four arches. An entrance to the gallery will be on the extreme eastern side. The main lobby is 17 by 36 feet. It opens with a well-hole through the ceiling into the second tier lobby. The stage is 44 feet deep, which is the greatest depth of any in the city, and is 60 feet in height.

The auditorium is 54 feet in length, and has a seating capacity of 900, exclusive of the boxes. The second tier will seat 650 and the gallery 750 persons. There are twelve proscenium boxes.

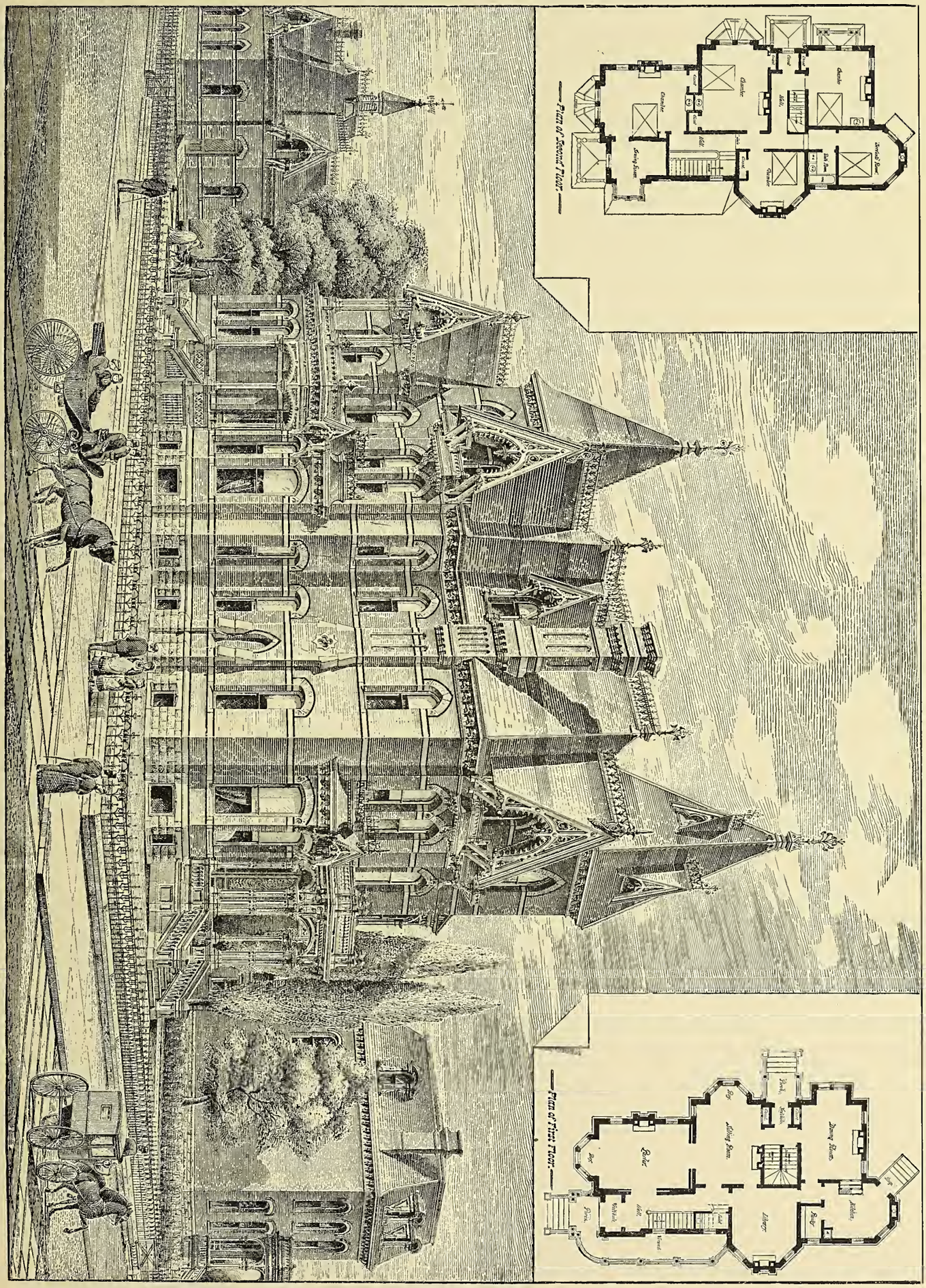
A saloon, 45 by 70 feet, will occupy the basement, and will have an entrance from both streets. The total cost of the building will be $50,000.

This firm have almost completed the elegant building "Hotel Moser," located on Pine, between Seventh and Eighth streets. It is four stories high, besides a basement. The front, which is of stone, is on Pine street, and is 75 feet, with a depth of 116 feet. The three upper stories will contain 116 sleeping-rooms and a parlor. The lower story will contain a commodious restaurant. Estimated cost, $55,000.

These gentlemen are engaged in the erection of seven opera houses outside of the city of St. Louis, costing from $40,000 to $100,000 each.

Among these may be mentioned the St. Paul Opera House, owned by Com. Davidson. The pressed brick for this edifice is furnished by Ithen Bros., of this city.

During the month of July the Building Commissioner issued 204 per-



Residence of E. E. Myers Architect Detroit-Mich.

mits for brick buildings, aggregating in cost the sum of $657,790, and 64 permits for frame buildings, aggregating $29,660 in cost.

Wages of Journeymen: Bricklayers, $4.50 to $5 per day; carpenters, $3 to $3.50; masons, $4; plasterers, $4; stonecutters, $4; hod-carriers, $3 to $3.50.

Price of Brick, etc.: Hand-made merchant, $7 per 1,000; ordinary red and hard, $8; strictly red and hard, $8.50; paving, $10 to $12; hand-made stock brick, $15 to $18; front press brick (stock), $20 to $30, Black lime, 30c. per bushel; white lime, 26c.; hair, 35c.; white sand, 75c. per barrel; plaster, $2.25; Portland cement, $4.

Synopsis of Building News.

BLOOMINGTON, IND.

The situation in this locality is very satisfactory. In addition to present operations, architects and contractors are making considerable preparation for carrying on projected work through the winter. The season has been quite active; very many of the buildings completed and under way have been of the cheaper grades, ranging from $700 to $2,000. The annexed affords an idea of the present *status*.

Architects Nichols & Sons: Indiana State University, three stories, of brick, stone and iron, 100 by 60 feet, to cost $80 (projected). Christian church, two stories, brick and stone, with slate roof, 44 by 100 feet, cost $15,000 (out for bids). Engine House, No. 2, two stories, brick and stone, 30 by 60 feet, cost $5,000 (out for bids). The following are underway: Jno. Waldron, Sr., residence, two stories, brick and stone, slate roof, 50 by 60 feet, cost $8,000; Nichols and Sons, contractors. Y. N. Hill, residence, two-story frame, 60 by 90 feet, cost $10,000; same firm contractors. A. Rose, residence, brick and stone, 35 by 70 feet, cost $5,000; same firm contractors. H. Wilson, residence, two-story frame, 50 by 60 feet, cost $3,000; Waller & Co., contractors. Robert Miers, residence, two stories, brick and stone, 50 by 60 feet, cost $5,000; W. C. Block, contractor. Allen McYary & Co., business house, three stories, brick and stone, 42 by 120 feet, cost $8,000; Nichols & Sons, contractors. Howe & Maxwell, business house, two stories, brick and stone, 50 by 85 feet, cost $6,000; same firm contractors. R. Wylie, business house, two stories, brick and stone, 24 by 132 feet, cost $3,500; S. McPhetridge, contractor. P. Bowman, business house, two-story, brick and stone, 18 by 85 feet, cost $2,500; same contractor.

CHICAGO, ILL.

The building outlook in Chicago, as gleaned from our architects, is quite flattering. Material is low, and with the labor market undisturbed the balance of the year promises great activity. Below are the indices:

Architect S. M. Randolph: A. L. Sweet, 241 Ashland avenue, green stone front, two stories and basement, 26 by 52 feet, cost $15,000 (nearly finished); Jos. Rutherford, contractor. John McLaren, Ashland avenue, near Polk street, two-story with cellar, Anderson pressed brick and brown stone, 41 by 45 feet, cost $15,000 (being plastered); Davis Studley, contractor. W. W. Cole, corner of Rush street and Walton place, three-story block of flats, Anderson pressed brick and stone, 25 by 96 feet, cost $18,000 (ready for plastering); W. A. & A. E. Wells, contractors. J. H. Milne, Ashland avenue, near Jackson street, Anderson pressed brick and brown stone, 29 by 85 feet, cost $13,000 (contracts not let); J. S. Ward, 512 West Monroe street, two-story and mansard, with cellar, Anderson pressed brick and brown stone, 26 by 70 feet (receiving proposals); Frank Clifton, Michigan avenue, between Thirty-fourth and Thirty-fifth streets, two-story and mansard, with cellar, green stone front, 25 by 84 feet (projected); Joseph Shaw, 396 to 402 West Congress street, block of four dwellings, two stories and cellar, stone fronts, 72 by 50 feet (projected); First Congregational church, frame chapel, Powell avenue, just outside of fire-limits, 40 by 75 feet (contracts not yet awarded); J. C. Burton, frame dwelling at Englewood, cost $4,000 (nearly finished); Mr. Mack, contractor. J. C. Fortimer, frame dwelling at Englewood (contracts not yet awarded); E. D. L. Sweet, frame dwelling at Oak Park, cost $4,500 (nearly finished); H. B. Dickinson, frame dwelling at Rockford, cost $10,000; Reuben Cook, contractor F. W. Matthiessen, addition to store on LaSalle street, cost $15,000. Henry Delaney, two-story and basement, pressed brick and stone, 24 by 60 feet, cost $7,000; W. A. & A. E. Wells, contractors.

Architects Silsbee & Kent: J. V. Weaver, 213 Illinois street, three-story and basement flats, brick, 20 by 70 feet, cost $7,000 (under roof); W. H. Iliff, contractor. Potter Palmer, Bank street, two houses, three stories and basement, Canada limestone and blue Bedford stone, thirty-six rooms, 51 by 70 feet, cost $35,000 (half finished, first floor laid); Potter Palmer, contractor. Porter Weston, North street, three-story and basement house in Colonial style, first story brick, and shingle work above, thirteen rooms, 38 by 60 feet, cost $10,500 (projected); H. J. Tilford, Fourth street, Louisville, Ky., three-story, pressed brick, Colonial style, red tile roof, red mortar, bays, balconies, verandahs, etc., thirteen rooms, 45 by 69 feet, cost $18,000 (under roof); J. H. Struck & Bro., contractors. F. D. Cooley, Fourth street, Louisville, Ky., Moorish music room, arabesque reliefs in papier maché, decorations in bronze and stamped leather, stained-glass and high coloring, 18 by 26 by 20 feet high, cost $8,000 (projected).

Architect C. P. Thomas: H. I. Birch, corner of North Clark and Chestnut streets, four-story block of five stores and flats, pressed brick and stone front, brick walls, flat roof, 106 by 70 feet, cost $15,000 (to be finished October 1); Moss & Chambers, masons; H. Gilsdorf, carpenter. F. F. Spencer, four-story store and flats, adjoining above and same description, 20 by 60 feet (to be finished October 1); same contractors. H. Tifft, North Clark street, opposite street-car barns, six four-story stores and flats, pressed brick and Bedford stone, 117 by 70 feet, cost $48,000 (to be finished October 1); Moss & Chambers, masons; F. H. Aners & Co., carpenters. F. F. Spencer, two stores and flats adjoining same, four stories, St. Louis pressed brick and Bedford stone, 48 by 80 feet, cost $20,000 (to be finished October 1); same contractors. Herbert Cassard, S.W. corner of 33d and State streets, five three-story stores and flats, pressed brick and brown stone, 105 by 62 feet, cost $35,000 (to be finished November 1); Jas. Conley, mason; Hartman Bros., carpenters. J. W. Kimball, residence, Asta street, two-story and mansard pressed brick and blue stone, 25 by 60 feet, cost $6,000 (to be finished October 1); W. H. Barton, mason; Steinwitz & Co., carpenters. Mrs. Ed. Wright, North Clark street, opposite Lincoln Park, flats three stories and basement, pressed brick, stone and terra-cotta, 25 by 75 feet, cost $9,000 (to be finished November 1); W. Guten, mason; F. H. Aners, carpenter.

Architects Peabody & Stearns: Judge Lambert, Ontario street, dwellings, Long Meadow (Mass.) brown stone for walls on all sides to roof, roof red slate, 70 by 60 feet (under way); for same, stable, Indiana pressed brick, red slate roof (under way); Clark & Fuller, contractors.

Architects Treat and Foltz: St. Luke's hospital, five stories and basement, brick, 154 by 161 feet, cost $125,000. E. A. Earnshaw *et al.*, contractors. Western Electric Co., four stories and basement, brick, 253 by 150 feet, cost $110,000; Messrs. Smith & Tobel *et. al.*, contractors. B. P. Moulton, three stories and basement, brown stone, 55 by 90 feet, cost $100,000; I. Tomlinson *et. al.*, contractors. J. Q. Adams, six stories and basement, brick, 80 by 172 feet, cost $130,000; C. & A. Price *et al.*, contractors. J. H. Swan, three-story and basement, brick, 43 by 74 feet, cost $30,000 (under way); A. Bamolt *et. al.*, contractors. W. G. Hibbard, three-story, brick, 30 by 80 feet, cost $13,000; same contractors. Herrick Johnson, three-story, green stone, 20 by 52 feet, cost $9,000; Bordmer *et al.*, contractors. I. Tomlinson, factory, four stories, brick, 50 by 123 feet, cost $13,000; F. Hechlon *et al.*, contractors. H. B. Mason, three-story, brick, 27 by 75 feet, cost $11,000; Fries *et al.*, contractors. C. T. May, four-story brick, 27 by 52 feet, cost $13,000; Agnew & Cox *et al.*, contractors. E. J. Lehman, four stories, brick, 20 by 73 feet, cost $7,000; Jno. Cox *et al.*, contractors. E. P. Hubbard, two houses, three stories, brick, 50 by 75 feet, cost $15,000; Houtain *et al.*, contractors. E. J. Lehman, two-story brick and timber at Lake View 80 by 25 feet, cost $8,000; Bodmer *et al.*, contractors. Saml. Chambers, at Milwaukee, Wis., three stories, brick, 35 by 160 feet, cost $15,000. H. C. Goudy, two-story barn, 28 by 35 feet, cost $3,000. C. B. Farwell, three stories, brick and stone, 65 by 75 feet, cost $—— (all the above are under way). J. H. Thompson, alteration, cost $2,000; J. A. Hunt, three stories, brick, 40 by 70 feet, cost $15,000 (projected).

Architect H. R. Wilson: O. J. Hull, corner of Park and Ashland avenues, six three-story and cellar houses, English-Gothic style, pressed brick and stone, French red slate roofs, each 22 by 53 feet, cost $36,000; Geo. Lehman & Co., contractors. W. R. Baker, 211 South Sangamon street, three-story and cellar apartment building, pressed brick and stone, 25 by 70 feet, cost $8,000; J. H. Mason, contractor. C. J. Hull, 5 and 7 Park avenue, four stories and cellar, pressed brick, stone and terra-cotta, flat roof, porch with granite columns, tiled entrance, elevators, ten apartments of eight rooms, 63 by 75 feet, cost $40,000; same contractor. C. W. Edwards, 105 West Adams street, two-story residence, pressed brick and stone, eleven rooms, flat roof, 24 by 50 feet, cost $6,000; Wilkins & Holman, contractors Dr. J. R. Buean, Erie strect, two two-story flats, brick, 48 by 50 feet, cost $10,000; same contractors. (All the above are under way.) Washingtonian Home, corner of West Madison street and Ogden avenue, five-story brick addition for hospital, dormitories, etc., 37 by 104 feet, cost $30,000 (projected). C. J. Hull, Ashley street, between Wood and Lincoln streets, twenty two-story houses, six rooms, brick and stone, 20 by 36 feet each, cost $40,000 (built). J. W. Thompson, Erie street, two two-story flats, brick, 48 by 43 feet, cost $8,000 (under way); Walkie & Holman, contractors. M. J. Dann, three-story and attic, eleven rooms, pressed brick and stone, 24 by 40 feet, cost $7,000 (under way); Geo. Lehman & Co., contractors. J. D. Lameraux, Hamilton avenue, two two-story brick residences, 24 by 36 feet, cost $8,000 (projected); C. G. Hayman, contractor. J. Demony, Erie street, addition, brick, 24 by 40 feet, cost $2,000 (under way).

Architect C. L. Stiles: W. R. Wiley, 2449 Michigan avenue, brick addition, with stone cellar and mansard slate roof, 22 by 38 feet, cost $5,000 (finishing); Wm. Pound, mason; Thos. Dortling, carpenter. Chas. F. Anthony, Winchester avenue, two-story and basement, pressed brick front, stone trimmings, 22 by 60 feet, cost $7,000 (out for bids). Mrs. L. Burroughs, 500 West Madison street, three-story store and tenements, cut-stone front, Lemont and blue Bedford, 25 by 50 feet, cost $8,500 (foundations in); Jas. Rutherford, mason; Jno. Roule, cut-stone; Vierling & McDonnell, iron. Hunter & Hawkins, Dupage and River streets, Elgin, Ill., three-story store building, Anderson pressed brick and stone trimmings, 62 by 78 feet, cost $25,000 (excavations completed); Wm. Lamming, contractor. City of Elgin, new High School building, brick, rock-face basement and trimmings of Bedford stone, 54 by 48 feet, cost $9,000 (walls completed); Theo. Magnus, mason; Jas. Lam, carpenter. Grace M. E. Church, Elgin, Ill., stone basement, brick superstructure, with stone trimmings, 52 by 80 feet, cost $18,000 (basement completed). Church of the Redeemer, Elgin, addition to building, brick, with Lemont stone trimmings, cost $3,500 (out for bids). Old M. C. Imperial Co., Colfax, Ia., frame hotel with stone foundations, 54 by 170 feet, cost $5,000 (advertising). Mrs. S. J. Beatty, La Grange, two-story frame cottage, 22 by 52 feet, cost $4,000 (foundations completed); Geo. Howard, contractor.

Architect P. W. Ruehl: J. L. Hoerber, residence, 26 by 56 feet, cost $10,000; J. V. Bense, contractor. Kuhner & Lasman, four-story and basement building, 72 by 80 feet, cost $30,000; Benes & Steinwitz and Eiltheburger, contractors. Bridget Koeffe, three-story and basement, 22 by 45 feet, cost $4,000; F. Kaiser, contractor. Wm. Atkins, three-story dwellings, 44 by 52 feet, cost $75,000. J. Wahl, three-story and basement buildings, 50 by 75 feet, cost $15,000; Hanson & Meyer, contractors. Cosmann & Schmit, four-story and basement building, 28 by 75 feet, cost $18,000; Juelsdorf & Kauf, contractors. Jos. McGuire, three-story dwelling, 22 by 56 feet, cost $4,000; Henry G. Peters, contractor. Henry

Koeber, three-story and basement building, 24 by 65 feet, cost $7,500; Benes & Ruttner Bros., contractors. Mrs. J. A. Craig, three-story dwelling, 44 by 98 feet, cost $7,500; J. V. Benes, contractor. John Burse, three-story dwelling, 24 by 56 feet, cost $7,000; same contractor. Anton Melka, three-story dwelling, 22 by 66 feet, cost $6,200; Krolovee & Bro., contractors. F. Groth, two-story dwelling, 22 by 48 feet, cost $4,500; Stiemnitz & Eilenberger, contractors. B. Harris, three-story and basement building, 24 by 75 feet, cost $10,000; Zuelsdorf *et al.*, contractors. Chris. Mench, three-story and basement building, 24 by 50 feet, cost $9,000; Krieg & Co., contractors. P. W. Ruehl, three-story dwelling, 21 by 54 feet, cost $5,000; Benes & Layer, contractors. (All of the above under way). Wm. Baker, four-story and basement dwelling, 24 by 100 feet, cost $12,000; Wm. Taylor, two-story and basement dwelling, 24 by 48 feet, cost $5,000; M. Schmit, four-story and basement building, 24 by 75 feet, cost $10,000. (All the above projected).

Architects O. J. Pierce & Speyer: D. W. Jackson, Vernon avenue, near Thirtieth street, two-story and attic, Gothic stone front, two dwellings, 42 by 68 feet, cost $13,500 (under way); D. W. Hayes, mason; Wm. Goldie, carpenter. The same, Thirtieth street, east of Vernon avenue, three dwellings, two stories, pressed brick, stone trimmings, 54 by 58 feet, cost $13,500 (ground broken); same contractors. M. Farley, Henry street, near Ashland avenue, two-story flats, 21 by 43 feet, cost $3,600 (nearly completed). D C. Chase, Englewood, two-story frame residence, 25 by 56 feet (projected). O. F. Fuller, Chestnut street, between Cass and Rush streets, five dwellings, three stories and basement, pressed brick and stone trimmings, 92 by 32 feet. Same owner, Rush street, near Chestnut street, three-story and basement dwelling, 19 by 32 feet, aggregate cost $35,000 (both under contract). Herbert Hammond, Normal Park, three-story frame residence, 36 by 48 feet (projected).

Architect Julius Frittel: Wm. Tempel, three-story and basement building, 60 by 75 feet, cost $15,000; M. Zipprich, contractor. J. S. Clark, three-story and cellar building, 35 by 90 feet, cost $23,000; J. Wartmann & Bro., contractors. Th. Minchin, three-story and cellar building, 26 by 50 feet, cost $9,000; Jno. Kelly, contractor. H. Gesselbracht, three-story and basement building, 50 by 100 feet, cost $30,000; Chas. Hellman, contractor. Geo. Merz, three-story and basement building, 25 by 85 feet, cost $14,000; Peter Hurter, contractor. John Philpin, three-story and cellar building, 25 by 85 feet, cost $13,000; Chas. Mangson, contractor. Mrs. M. Knoner, three-story and basement building, 20 by 46 feet, cost $6,000; Wildner & Frank, contractors. F. Linsenbarth, three-story and cellar building, 50 by 75 feet, cost $22,000; P. Welter, contractor. Chas. Manske, four-story and cellar building, 50 by 85 feet, cost $30,000; Chas. Teth, contractor. H. Mullen, three-story and basement building, 25 by 60 feet, cost $10,000; D. Hayes, contractor. M. Sullivan, three-story and basement building, 25 by 50 feet, cost $8,000; same contractor. Chas. Hill, three-story and basement building, 50 by 100 feet, cost $30,000; H. Appel, contractor. (All of the above underway). Two schoolhouses at Maple Wood, two stories and basement, 50 by 80 feet (projected).

Architect J. J. Flanders: W. M. Life Ins. Co., block of five houses, brick and stone, cost $25,500; Edward Hudson, contractor.

CLEVELAND, O.

Moderately active; prospects favorable.

Architect J. Charlot Nevins: Warren High School, Warren, O., two-story and mansard, with tower, brick and stone, cost $48,000 (finishing up). Shaw Ready, Collamer, O., two-story building, brick and stone, cost $16,000. Miller Block, Ohio street, Cleveland, three stories, brick and stone, cost $8,000. H. M. Brainard, residence, cost $10,000. B. McCue, Massillon, O., residence, cost $8,000. J. K. Russel, Massillon, O., residence, cost $14,000. (All the above under way.) B. Harris, West Cleveland, residence, cost $6,000. M. J. Lawrence, Cleveland, residence, cost $11,000. A. S. Guich, residence, cost $4,500. A. B. Lyman, residence, cost $4,000. G. B. Solders, residence, cost $3,200. (All the above finished.) Brooklyn street, street railway buildings, offices, waiting-rooms, stables, car-barns, etc., cost $40,000 (under way).

CINCINNATI, O.

Injuries resulting from the spring flood have pressed the builders with work. The outlook is good. There has been no trouble from strikes, and both contractors and mechanics are having a profitable season. We glean the following work under way:

Architect Geo. W. Rapp: Conrad Windish, Ohio avenue, block of six brick dwellings, two-and-a-half stories, slate and tin roof, 71 by 120 feet, cost $40,000; F. D. Kollendorf, contractor. Henry Koch, Woodburn avenue, Walnut Hills, frame dwelling, two-and-a-half stories, slate roof, 38 by 45 feet, cost $7,000; Bice & McMiller, contractors. Julius Balke, Lewis street, Walnut Hills, brick stable, two stories, slate roof, 39 by 50 feet, cost $6,700; James Griffith & Sons, contractors. Cincinnati street railway company, head of Elm street inclined plane, alterations and additions to Pavilion, cost $10,000; J. W. & T. G. Robinson, contractors.

CLINTON, IOWA.

Building fairly active; no particular boom.

Architect W. W. Sanborn: John Morris, two-story frame dwelling, with Queen Anne roof, 34 by 64 feet, cost $5,000 (under way); A. E. Wright, contractor. T. Peterson, two-story store building, brick, 24 by 70 feet, cost $4,000 (in course of construction); J. Deipner, contractor. Haslow & Harding, two-story brick block, 75 by 100 feet, cost $12,000 (under way); W. Black and owners, contractors. Morrison district, addition to school building, 53 by 53 feet, cost $6,500 (foundations let). Jackson county, county house on poor-farm, brick, 32 by 62 feet, cost $8,000 (under way); J. Becker, contractor. Same, county asylum, brick, 32 by 62 feet, cost $8,000 (projected). H. G. Coe, Clarence, Iowa, frame dwelling, 38 by 70 feet, cost $7,000 (under way); A. E. Drake, contractor. A. Sutton, Clinton, Iowa, frame cottage, 32 by 54 feet, cost $2,000 (under way).

DUBUQUE, IA.

Bui ding operations fairly good, with indications of remaining so throughout the season.

Architect F. D. Hyde: W. H. Day, two-and-a-half-story frame residence, 40 by 60 feet, cost $0,000 (foundations contracted for). M. M. Walker, two-story frame residence, 38 by 58 feet, cost $8,000 (under way). E. J. Richards, two-story frame residence, 20 by 30 feet, cost $1,800 (under way); John Needham, contractor. Wm. Rebman, two-and-a-half-story brick-veneered residence, 28 by 36 feet, cost $5,000 (pieced out). W. H. Peabody, two-story and basement brick residence, 32 by 57 feet, cost $5,500 (just finished). Dubuque Omnibus Co., two-story brick stable, 69 by 68 feet, cost $7,000 (just completed). B. B. Richards, two-and-a-half-story frame residence, 45 by 70 feet, cost $12,000 (under way). F. D. Hyde, two-story frame residence, 24 by 48 feet, cost $2,500 (under way and pieced out). James Howie, six three-story tenements, brick, 114 by 58 feet, cost $15,000; James Nevins, contractor. Paint Works Co., three-story brick factory, 30 by 114 feet, cost $6,000 (pieced out). Schrieber & Chincher, four-story warehouse block, brick, 50 by 113 feet, cost $10,000 (under way and pieced out). Thomas Ryan, three-story business block, brick, 32 by 75 feet, cost $6,000 (under way and pieced out). E. T. Walden, Manson, Ia., two-story frame residence, 24 by 50 feet, cost $2,500. J. H. Neff, Hampton, Ia., two-story frame, brick, 24 by 48 feet, cost $2,000. Schoolhouse, Allison, Ia., two-story brick, 32 by 60 feet, cost $5,000. Schoolhouse, Rock Valley, Ia., frame, 32 by 60 feet, cost $4,500. Schoolhouse, Ackley, Ia., one-story frame, 26 by 40 feet, cost $1,500. Business block, Britt, Ia., two stories, 90 by 60 feet, cost $8,000. (All the above out for bids.)

DES MOINES, IOWA.

Business very good. Architects have a large correspondence, especially for churches, schoolhouses, etc. Outlook is better than at any previous part of the season.

Architects B. J. Bartlett & Sons: Aldine building, F. M. Mills, owner, four stories, Milwaukee pressed brick and Ohio sandstone, 22 by 100 feet, cost $11,000; E. D. James, mason. Mrs. D. B. James, three-story residence, brick with stone trimmings, 29 by 56 feet, cost $8,000; John Bailey, mason; R. A. West, carpenter. A. D. West, two story frame residence, 32 by 50 feet, cost $3,000; R. H. Baldrick, contractor. D. R. Ewing, two-story frame residence, 38 by 60 feet, cost $10,500; D. R. Ewing, contractor. J. W. Brown, two-story residence, brick with stone trimmings, 28 by 59 feet, cost $6,000 (done by the day, all of the above nearly completed); J. H. Holland, two-story frame residence, 24 by 42 feet, cost $3,000 (under way); P. H. Baldrick, contractor. H. W. Sessions, block of three two-story residences, brick, 60 by 44 feet, cost $6,000 (out for bids); Mrs. K. B. Day, Centreville, Ia., two-story frame residence, 28 by 46 feet, cost $4,500 (under way); L. R. Feitch, contractor. Baptist church, Marquette, Michigan, brown stone, 66 by 109 feet, cost $3,000 (under way); Presbyterian church, Sedalia, Mo., brick and Warrensburg stone, 58 by 96 feet, cost $16,000 (under way); Baptist church, Greenfield, Ia., frame, 32 by 59 feet, cost $3,300 (under way); J. W. Akin, contractor. Presbyterian church, Chicago, Ill., Anderson pressed brick, stone trimmings, 70 by 103 feet, cost $16,000 (under way); J. H. Crumby, contractor. Congregational church, Cheyenne, Wyo., brick and stone, slate roof, 60 by 80 feet, cost $15,300 (under way); Presbyterian church, Higginsville, Mo., brick and Warrensburg stone, 50 by 56 feet, cost $10,000 (under way); R. Cavanaugh, mason; Dinwiddie & Co., carpenters. Congregational church, Steubenville, O., brick and stone, 43 by 96 feet, cost $18,000 (under way); J. H. Nicholson, mason; E. Graffair, carpenter. Presbyterian church, Colder, Mo., frame, 42 by 40 feet, cost $2,500 (not yet contracted); Central Female College, Lexington, Mo., brick with stone trimmings, 50 by 100 feet, cost $30,000 (projected); improvements residence F. M. Mills, Des Moines, frame, cost $6,000 (projected).

EVANSVILLE, IND.

Status at present dull, but with more encouraging prospects for the fall.

Architects Reed Bros.: Reitz & Garvin, banking-house and offices remodeled and new front put in, three stories, pressed brick and stone, tin roof, 40 by 90 feet, cost $8,000 (nearly completed); G. Goodige, H. R. Cadess *et al.*, contractors. M. J. Bray, Jr., three-story store, pressed brick and stone, tin roof, 20 by 140 feet, cost $5,000 (under way); Kuhlman Bros., J. Meyer *et al.*, contractors. St. Paul Episcopal church, stone, with slate roof, 44 by 88 feet, cost $32,000 (foundations in); Otto Kroll and F. Coster, contractors. New wing to school building, two stories, brick and stone trimmings, 50 by 80 feet, cost $10,000 (under roof). Public library (donated by Hon. W. Carpenter to city of Evansville), brick, stone and terra-cotta, 75 by 75 feet, cost $70,000 (roofed and plastered); Saml. Bayard, two-story addition to residence, brick and stone, tin roof, cost $5,000 (just begun; work done by the day). A. G. Clood, McLanders, Ill., two-story residence, brick and stone trimmings, slate roof, cost $25,000 (under way; work done by the day). W. W. Shelby, Henderson, Ky., two-story residence, brick with stone trimmings, slate roof, cost $10,000 (foundations in); O'Brien & Hicks, brickwork; John Mundo, carpentry contractor. Mr. R. Cotton, Madisonville, Ky., two-story residence, brick and stone, slate roof, cost $8,000 (work done by the day).

EAU CLAIRE, WIS.

Building outlook good.

Architects Gurnsey & Hind: Opera House Co., opera house, 105 by 165 feet, cost $60,000. Geo. B. Shaw, residence, 40 by 60 feet, cost $40,000. R. H. Chute, residence, 38 by 60 feet, cost $4,000. J. G. Thorp, residence, 40 by 55 feet, cost $25,000. Henry Davis, residence, 42 by 70 feet, cost $30,000. D. R. Moore, residence, 80 by 40 feet, cost $28,000. Mrs. R. Porter, residence, 40 by 40 feet, cost $10,000. S. Smith, stores, 80 by 60 feet, cost $15,000. R. H. Rust, residence, 42 by 65 feet, cost $10,000. D. W. Day, residence, 30 by 55 feet, cost $8,000. F. E. Huias, residence, 30 by 42, cost $5,000; Opera House Co., two stores, 26 by 165, cost $10,000 (all being done by day work).

FRANKFORT, IND.

The season has been good, but the present outlook is not so encouraging.

Architect J. W. Hammond: W. A. Coulter, opera house, brick, 66 by 132 feet, cost $35,000 (to be opened August 9); sublet to various parties. D. B. Henderson, block of stores, two stories, brick and iron, with tin roof, 66 by 132 feet, cost $15,000; W. M. Palmer, contractor. Mrs. Jennings, one-and-a-half-story cottage, cost, $1,500; same contractor. A. Hevalin, two-story brick dwelling, cost $2,500; J. Dalby, contractor. Johnson high school, two-story, brick and stone, 69 by 73 feet, cost $1,500; J. L. Fatout, contractor. H. G. Morrison, two-story frame dwelling, cost $2,500; J. Dalby, contractor. J. G. Clark, two-story frame dwelling, cost $1,500. M. E. church, one-story brick and stone, with slate roof, 64 by 36 feet, cost $17,000; J. F. Evans, contractor. C. R. Pense, two-story brick dwelling, cost $6,000. Kerklin school building, brick and stone, cost $6,000; L. H. Daniels, contractor. Public school building, Galveston, Ind., two stories, brick, cost $7,000; P. A. Sassman, contractor. Baptist church, Thornton, Ind., brick, with slate roof, 32 by 46 feet, cost $2,000. (All the above are under way, with exception of the last, which is out for bids.)

FARGO, D. T.

Business dull and the outlook unfavorable, dependent on the crops. The season has been much slacker than the last.

Architects Daniels & Proctor: S. G. Roberts, three-story and basement, brick, 135 by 85 feet, cost $60,000. John Grady, two-story and basement, stone front, 25 by 70 feet, cost $6,000. (All the above under way.) W. H. Weelin, Grand Forks, D. T., frame residence, 24 by 54 feet, cost $5,000 (projected). First National Bank, Casselton, D. T., two stories and basement, 50 by 90 feet, cost $22,000; Silas King, contractor. Hubbard & Grosvenor, same place, two-story and basement building, 50 by 80 feet, cost $15,000; John Devitt, contractor. Austin & Williams, Fergus Falls, Minn., three-story and basement building, 50 by 100 feet, cost $15,000; Reynolet & Parent, contractors. Masonic temple, same place, two-story and basement building, 50 by 110 feet, cost $14,000. S. Austin, same place, two-story and basement residence, 26 by 60 feet, cost $9,000; Sheean & Beckmann, contractors. C. C. Clement, same place, frame residence, 20 by 40 feet, cost $6,000. (All the above under way.) Fargo Republican Printing Co., three-story and basement building, brick, with tin roof, 40 by 100 feet, cost $25,000 (projected). School building, Casselton, D. T., frame, 30 by 60 feet, cost $10,000. J. B. Folsom, Fargo, D. T., frame residence, 22 by 55 feet, cost $9,000. D. F. Polk, same place, frame residence, 20 by 40 feet, cost $5,000. (All the above just finished.)

INDIANAPOLIS, IND.

Architect Edgar Hodgson: Peter Gamtng, two frame residences, 32 by 66 feet, cost $8,000; C. F. Rafert, contractor. Lindley Vinton, frame residence, 35 by 65 feet, cost $4,000; F. Rubush, contractor. W. J. Richards, residence remodeled, 38 by 56 feet, cost $4,000; same contractor. E. J. Hodgson, frame residence, 40 by 60 feet, cost $6,000. J. B. Jaqua, Portland, Ind., two-story business block, brick and stone, two stories, 40 by 90 feet, cost $7,500. J. Williams, Marion, Ind., three-story bank building, brick and stone, 66 by 132 feet, cost $50,000; H. Ridout, contractor. Isaac Silvernale, Portland, Ind., store building remodeled, cost $5,000. C. S. Artbun *et al*, two-story business block, brick and stone, 132 by 86 feet, cost $2,000; W. H. Gettinger, contractor. W. B. Lebnig, two-story business block, 66 by 86 feet; cost $10,000. Reed & Co., two-story business block, 55 by 100 feet, cost $10,000. J. H. Wassin, Crawfordsville, Ind., frame residence, 30 by 65 feet, cost $5,000; J. C. Dwiggins, same place, frame residence, 40 by 70 feet, cost $6,000. Central National Bank, Greencastle, Ind., three-story building, brick and stone, 66 by 103 feet, cost $32,000; P. Routier, contractor. Delaware Co., Muncie, Ind., county jail, 50 by 50 feet, cost $22,000; W. H. Meyer & Son, contractors. Huntington Co., Huntington, Ind., county jail, 50 by 100 feet, cost $26,000; J. W. Hinkley, contractor. Mason Co., Maysville, Ky., county jail, 65 by 130 feet, cost $38,000; same contractor. (All the above are underway). J. W. Ryan, Muncie, Ind., two-story frame residence, 55 by 92 feet, cost $10,000 (projected).

KANSAS CITY, MO.

Building matters are rather quiet as regards large enterprises; owners inclined to put off until another season. There is a demand for small houses of five and six rooms, which is likely to stimulate fall trade.

Architects Greenleaf & Behrend: Carle Cracker and Confectionery Co., four stories, brick, with felt and gravel roof, 60 by 80 feet, cost $8,000 (just finished); W. E. Greenleaf, superintendent. P. Larson & Co., six one-story frame cottages, 20 by 40 feet, cost $4,500; J. L. Davidson, contractor. School Board, three stories, brick and stone schoolbuilding, slate roof, 100 by 100 feet, cost $15,000; C. J. Lucas & Son, contractors. J. E. Carle, four three-story dwellings, brick, with slate roofs, 23 by 40 feet, cost $18,000, separate contracts; W. E. Youngly, superintendent. J. S. Nettleton, two two-story dwellings, brick, with slate roofs, 22 by 50 feet, cost $8,500; James Brennan, contractor. E. R. Champion, two-story dwelling, with slate roof, 21 by 42 feet, cost $3,000; O. E. Bowen and T. O. Combs, contractors. F. L. Payne, two two-story cottages, frame, 18 by 30, cost $900; John Thomas, contractor. J. R. Curry, three-story double dwelling, brick, with composition roof, 40 by 40 feet, cost $5,000; same contractor. John McC. Lord, two three-story store buildings, stone fronts, with tin roofs, 50 by 80 feet, cost $12,000 (by daywork). (All the above under way). Synagogue congregation, two-story church edifice, brick and stone, with slate roof, 42 by 100 feet, cost $20,000 (projected). A. L. Tifferman, Pleasant Hill, Mo., one-story store building, brick, with tin roof, 20 by 50 feet, cost $2,000 (under way); O. Kolstad, contractor. S. G. Landers, same place, one-story store building, brick, with tin roof, 20 by 60 feet, cost $2,500 (just finished, day work); W. Greenleaf, supe intendent. S. M. Bowman, Kansas City, five-story hotel building, brick, with tin roof, 125 by 200 feet, cost $60,000 (projected). Same party, two-story market-house, brick and stone, with slate roof, 75 by 150 feet, cost $25,000 (projected). J. F. Carle, block of seven three-story dwellings, brick, with slate roofs, 150 by 42 feet, cost $23,000 (projected). F. T. Miller, Holden, Mo., two-story frame dwelling, 30 by 45 feet, cost $4,000 (under way); J. T. Nicholson, contractor. Wm. Steele, same place, two two-story stores, brick, with tin roofs, 50 by 142 feet, cost $23,000 (projected). E. A. Gowdy, Pleasant Hill, Mo., two two-story stores, brick, with tin roofs, 20 by 40 feet, cost $2,700 (under way, by daywork); W. E. Greenleaf, superintendent.

Architect F. B. Hamilton: P. D. Ridenour, two-story building, brick, with slate roof, 54 by 84 feet, cost $30,000. D. B. McMechan, two-story building, brick, 23 by 62 feet, cost $4,500. F. Howard, two-story frame dwelling, 26 by 49 feet, cost $4,800. (All the above just completed). A. A. Baker, two-story dwelling, brick, with slate roof, 34 by 63 feet, cost $9,000 (just lathed). A. R. Meyer, two-story dwelling, brick, 23 by 47 feet, cost $4,500 (just plastered). Richard Gentry, two-story dwelling, brick, with slate roof, 42 by 55 feet, cost $9,000 (attic joists on). E. J. Farnsworth, two-story dwelling, brick, 31 by 55 feet, cost $4,000 (foundations being put in). J. S. Rogers, two-story frame dwelling, with slate roof, 45 by 63 feet, cost $12,000 (frame being raised). A. C. Monroe, three-story store and offices, brick, with gravel roof, 18 by 60 feet, cost $6,000 (foundations in). M. L. Nugent, two-story store building, brick, with gravel roof, 24 by 65 feet, cost $4,000 (roof on).

Architect V. W. Coddington: J. M. Byrne, two-story dwelling, brick with slate roof, 34 by 50 feet, cost $7,000 (building by daywork). P. D. French, two-story dwelling, brick, with slate roof, 33 by 52 feet, cost $6,200; T. W. Byron, contractor. J. H. Williams, two-story dwelling, brick, with slate roof, 31 by 40 feet, cost $3,800; Wm. West, contractor. Church of Charity Hospital Association, three-story and basement hospital building, brick, with slate roof, 36 by 78 feet, cost $11,000; Welsh & McLeary, contractors. C. S. Hartwell, two-story frame dwelling, with slate roof, 24 by 38 feet, cost $4,200; T. W. Byron, contractor. O. L. Woodgate, two-story frame dwelling, 25 by 40 feet, cost $3,000; Harvey & Robinson, contractors. W. J. Elliott, two-story frame dwelling, 23 by 30 feet, cost $2,000; A. J. Bonham, contractor. Clyde Congregational church, chapel building, brick with slate roof, 40 by 65 feet, cost $6,500 (by daywork). Wormstead & Pearce, two-story frame dwelling, 20 by 28 feet, cost $3,000; S. J. Bonham, contractor. School Board, Sedalia, Mo., two two-story brick schoolhouses, 64 by 78 feet, cost $12,500 each. (All the above are underway and chapel nearly finished).

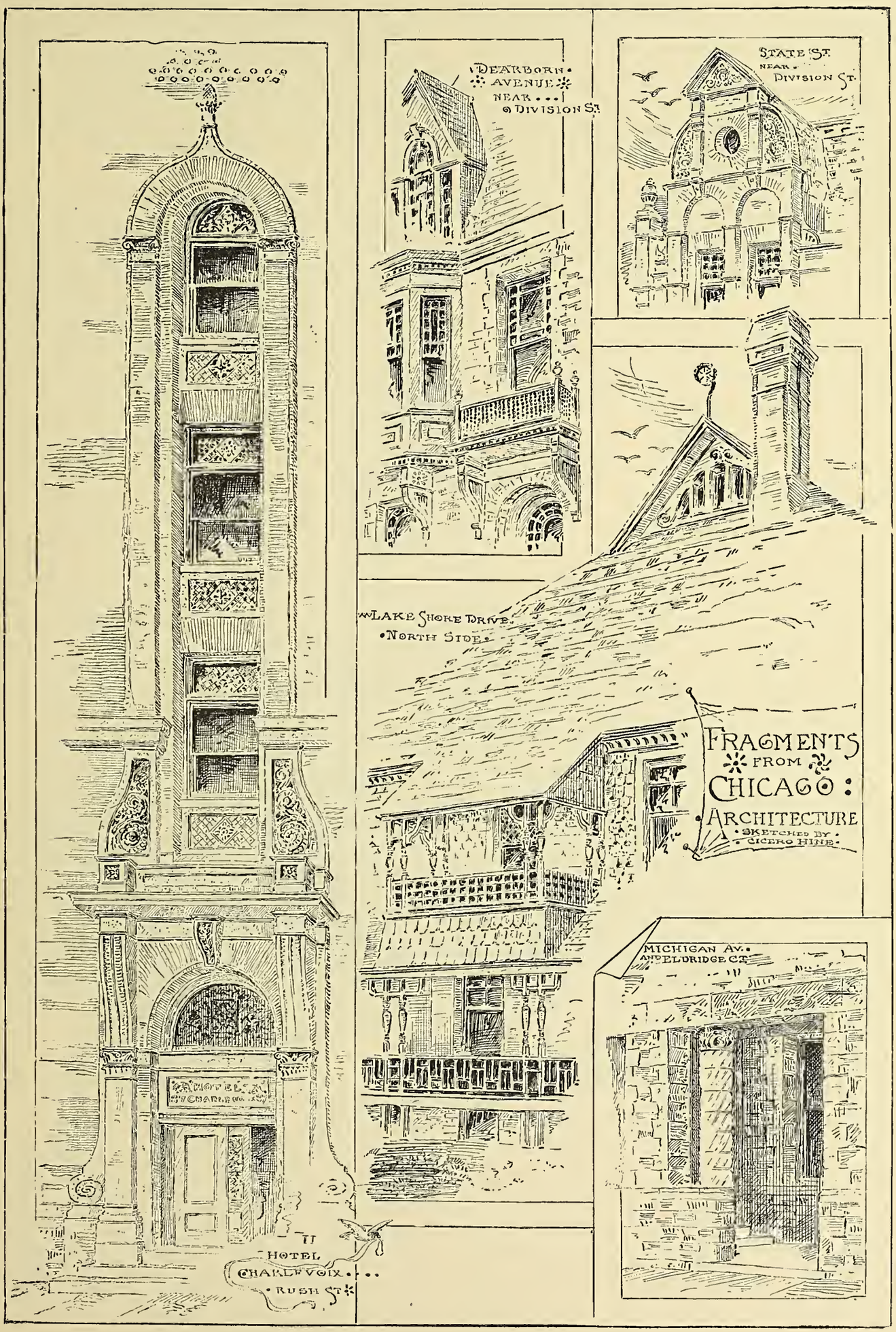
MINNEAPOLIS, MINN.

The business throughout the season has been good, and the outlook is equally good, better than last year.

Architect J. Haley: E. S. Jones, two-and-a-half-story frame house, 50 by 100 feet, cost $40,000 (let by daywork). Pardy & Whittaker, eight tenements, brick, 36 by 155 feet, cost $30,000; P. W. DeSancey, contractor. W. S. Harding, double dwelling, brick, 44 by 36 feet, cost $8,000; S. C. Cutter, contractor. Frank Morse, brick dwelling, 35 by 60 feet, cost $8,000; McMillian, contractor. Jno. Dunwoody, frame dwelling, 30 by 60 feet, cost $5,000; P. W. DeSancey, contractor. W. Neil, block of frame tenements, 45 by 132 feet, cost $8,000; Mr. Berglin, contractor. Same, double dwelling, frame, 51 by 56 feet, cost $12,000; same contractor. C. Hinnelbach, store building, brick, 29 by 80 feet, cost $12,000; M. Wetzel, contractor. R. C. Todd, frame dwelling, 40 by 60 feet, cost $4,000; Healand, contractor. Mr. Munch, frame dwelling, 40 by 60 feet, cost $6,000. D. R. Wagner, dwelling, 40 by 70 feet, cost $12,000; McMillian, contractor. W. B. Hawley, double store building, brick, 44 by 100 feet, cost $15,000; Mr. Bisbee, contractor. C. Hanson, frame dwelling, 30 by 60 feet, cost $5,000 (by daywork). Medhal & Co., market building, 80 by 200 feet, cost $30,000; D. Sullivan, double frame dwelling, 44 by 45 feet, cost $8,000; C. O. Lanson, contractor.

Architect E. S. Stebbins: Winecke & Dorn, two-story frame stores and tenements, 44 by 60 feet, cost, $5,800; W. P. Burnett, contractor. S. P. Channell, five two-story frame stores and tenements, 116 by 60 feet, cost $15,000; Hyatt, contractor. Same, livery stable, frame, 44 by 105 feet, cost $6,000; same contractor. Coe & Forman, block of three frame stores and tenements, 70 by 55 feet, cost $7,000; Troston, contractor. Gethsemane Episcopal Church Society, church building, Iowa limestone, 112 by 115 feet, cost $40,000; F. Trainor, contractor. Budge & Griggs, Grand Forks, D. T., four-story block, St. Louis pressed brick front, with stone trimmings, 100 by 100 feet, cost $60,000 (half completed). School Board, Warren, Minn., school building, two stories, brick and stone, 50 by 60 feet, cost $8,000 (out for bids). School Board, Crookston, Minn., school building, two stories, pressed brick front, with brown stone trimmings, 68 by 70 feet, cost $18,500 (excavations commenced). School Board, Monticello, Minn., school building, veneered, 60 by 70 feet, cost $9,800 (ready for plastering). Episcopal Society, Owatonna, Minn., church, open timber roof, 30 by 60 feet, cost $4,000 (to be commenced at once). G. G. Barnum, Duluth, Minn., frame dwelling, cost $3,000 (under way). W. E. Johnston, Huron, D. T., frame dwelling, cost $3,400 (under way).

Architect W. H. Dennis: John Thompson, two-story dwelling, pressed brick and slate roof, 54 by 70 feet, cost $30,000 (by daywork). W. Sargent, two-story dwelling, pressed brick front and slate roof, 57 by 60 feet, cost $15,000; R. W. Jordan, contractor. P. D. McMillan, two-story dwelling, pressed brick front and slate roof, 57 by 60 feet, cost $15,000 (in progress, by daywork). J. H. Conky, two-story frame dwelling, 48 by 76 feet, cost $13,000 (in progress, by daywork). Wyman Elliott, two-story dwelling, pressed brick front and slate roof, 50 by 70 feet, cost $18,000. Same, three-story warehouse, brick, with tin roof, 22 by 112 feet, cost $12,000 (drawings being made). Holbrook & Jackson, three-story packing-house, brick, with composition roof, 22 by 157 feet, cost $12,000; J. J. Richardson, contractor. H. R. Farr, two-story frame dwelling, 29 by 60 feet, cost $3,000 (by daywork). Mower Co., Court


DEARBORN AVENUE NEAR DIVISION ST.
STATE ST. NEAR DIVISION ST.
LAKE SHORE DRIVE. NORTH SIDE.
MICHIGAN AV. AND ELDRIDGE CT.
HOTEL CHARLEVOIX
RUSH ST.
FRAGMENTS FROM CHICAGO: ARCHITECTURE
SKETCHED BY CICERO HINE.

House, Austin, Minn., three stories and basement, St. Louis pressed brick and Ohio stone, slate roof, 75 by 125 feet, cost $70,000; Snow & Alsip, of Chicago, contractors. G. B. Wright estate, Fergus Falls, Minn., block of three-story stores and offices, brick and stone, 50 by 100 feet, cost $25,000 (by daywork). (All the above are in progress of construction.)

MANSFIELD, O.

The building business is active and the outlook is satisfactory all over the state.

Architect M. Bumbaugh: L. A. Strong, two-story building, brick and stone, 44 by 56 feet, cost $12,000; McCoy Bros., contractors. R. Smith, three-story store building, 22 by 60 feet, cost $6,000; same contractors. Hon. John Sherman, remodeling residence, brick and stone, 65 by 85 feet, cost $12,000; John Lekeger, contractor. Findlay College, church building, three stories, brick, with stone trimmings, 168 by 120 feet, cost $60,000; Pierce & Coleman, of Dayton, contractors. School Board, McComb, O., school building, two stories, brick, with stone trimmings, 75 by 77 feet, cost $16,000; B. Young and Harger & Co., contractors. Reformed Church South, Tiffin, O., church building, brick and stone, 46 by 60 feet, cost $10,000; Temal, contractor. W. Wicher, Urbana, O., three-story brick and stone building, 60 by 100 feet, cost $18,000; W. M. Wicher, contractor. (All the above are under construction.)

MOBERLY, MO.

Outlook as good as can be desired. Brickmakers are kept busy.

Architect Edwin Cook: R. W. Miller, block of three stores and offices, two stories, brick, with gravel roof, 58 by 80 feet, cost $10,000; James Landisa, contractor. James Landisa, two-story brick building, 20 by 76 feet, cost $3,000; own contractor. Henry Nice, two-story residence, brick, 38 by 36 feet, cost $3,400. Block of two stories, Centralia, Mo., cost $22,000. (All the above work is under construction.)

RICHMOND, IND.

Work is slacking off at this point, but the outlook is fair.

Architect John A. Hasecoster has just furnished the plans for a high school building at Granville, Drake county, O., of two stories and mansard with towers, brick and stone, with slate and tin roof, 98 by 154 feet, cost $40,000; Alex. Kerr, contractor.

SPRING VALLEY, MINN.

The building outlook at this point is better than it has been for any period within six years.

Architect H. J. Anderson; J. O'Brien, two-story frame residence, 30 by 52 feet, cost $5,000. Wells School Board, two-story school building, brick veneered, 40 by 90 feet, cost $10,000. B. F. Farmer, two-story frame residence, 16 by 78 feet, cost $3,000. R. Steffens, two-story frame residence, 18 by 46 feet, cost $2,000. W. H. Strong, two-story frame residence, 16 by 42 feet, cost $1,600. J. D. Allen, two-story frame residence, 16 by 40 feet, cost $1,500. Carlston Church Society, frame church building, 26 by 52 feet, cost $2,000. W. Cooper, two-story frame barn, 44 by 41 feet, cost $800. S. Turner, frame barn, 40 by 56 feet, cost $1,000. Village of Spring Valley, bridge combination, 45 by 24 feet, cost $800. (All of the above are in course of construction.) H. J. Anderson is the contractor for all the work except the first two items; G. A. Baker is the contractor for the first and N. B. Craigh for the second.

ST. LOUIS, MO.

Building condition very good and future prospects favorable.

Architect O. A. Grable: Jas. M. Ghio, two-story dwelling, stone and granite front, 37 by 56 feet, cost $22,000; J. H. Dunlap, contractor. F. H. Ludington, two-story dwelling, stone and granite front, 45 by 65 feet, cost $20,000; D. Evans & Bro., contractors. Mrs. C. T. Lewis, three-story store building, pressed brick and stone, 50 by 60 feet, cost $20,000; S. Ross, contractor. Mrs. M. J. McCreery, two-story store building, brick, 35 by 67 feet, cost $6,000; A. E. Cook, contractor. N. C. Harris, three-story dwelling, stone front, 22 by 71 feet, cost $9,000; Greenwald & Wind, contractors. B. W. Lewis, block of four three-story and basement dwellings, brick and stone, 103 by 45 feet, cost $25,000; same contractors. Miss M. E. Boyer, three-story store building, pressed brick front, 21 by 70 feet, cost $9,000; same contractors. J. Meyer, two-story building, stone and granite front, 50 by 72 feet, cost $20,000; A. E. Cook, contractor. M. Bernheimer, three-story store building, pressed brick front, cost $40,000 (projected). H. D. Laughlin, four pressed brick dwellings, 75 by 55 feet, cost $17,000 (projected). J. B. Ghio, two two-story dwellings, pressed brick, 35 by 50 feet, cost $7,000; M. Austin, contractor. C. Eichle, three two-story dwellings, stone fronts, 70 by 60 feet, cost $20,000 (projected). G. P. Whitelaw, two-story store building, stone and iron, 25 by 100 feet, cost $17,000; B. Stollemeyer, contractor. M. Bauman, three-story store building, brick, with galvanized iron front, 20 by 75 feet, cost $9,000; A. E. Cook, contractor. Mrs. G. A. Bronson, two-story building, brick, with brown stone front, 40 by 60 feet, cost $10,000 (projected). E. C. Moore, Columbia, Mo., two-story frame dwelling, 50 by 60 feet, cost $15,000; John McDonald, contractor. Same, four two-story frame houses, each 32 by 35 feet, cost $12,000; same contractor. Charles May, Atlanta, Ga., two-story dwelling, brick and stone, 50 by 72 feet, cost $14,000. A. Gruble, John's Pass, Fla., two-story frame dwelling, 30 by 60 feet, cost $5,000.

By John Beattie: J. H. Maurice, two two-story dwellings, brick, 22 by 67 feet, cost $16,000; own contractor. Liggett & Myers Tobacco Co., five-story warehouse, brick, 100 by 120 feet, cost $16,000; J. K. Burden, contractor. H. B. Eggers, four-story flouring-mill, brick, 49 by 90 feet, cost $11,000; H. Ellermann, contractor. Mary Rogers, addition to building, stone, 75 by 90 feet, cost $10,000; J. W. Givens, contractor. Henry Mundt, two two-story buildings, brick, 42 by 78 feet, cost $8,900; A. Fenner, contractor. Famous Shoe and Clothing Co., three-story building, brick, 60 by 138 feet, cost $30,000. Julia Kessell, three two-story buildings, brick, 50 by 51 feet, cost $9,800; F. Offermann, contractor. F. I. Bryan, three-story building, brick, 40 by 70 feet, cost $10,000; F. W. Laffhagen, contractor. St. Louis Woodenware Works, two-story building, brick, 45 by 54 feet, cost $7,500. J. D. Lucas, four-story building, brick, 119 by 109 feet, cost $80,000; B. Weber, contractor. J. B. Ghio, three-story building, brick, 60 by 60 feet, cost $8,300; S. C. McCormack, contractor. W. Kennedy, two-story building, brick, 50 by 59 feet, cost $8,000; J. D. Fitzgibbons, contractor. St. Louis Type Foundry, three-story building, brick, 55 by 43 feet, cost $8,000; C. E. Illsley, contractor. Geo. P. Whitelaw, four-story building, brick, 25 by 100 feet, cost $13,000; B. F. Stotlemeyer, contractor. J. M. Carpenter, four-story building, brick, 22 by 120 feet, cost $9,100; M. Kirkwood, contractor; A. Demuth, two-story building, brick, 50 by 51 feet, cost $9,000; Helm Brothers, contractors. B. Mossler, two-story building, brick, cost $2,500.

TOLEDO, O.

At this point there has been quite a building boom, and the prospect is good for a continuance.

Architects D. W. Gibbs & Co: Board of Education, eighth ward public school building, brick and stone, with slate and tin roof, 75 by 85 feet, cost $18,000 (in construction); A. Bently, contractor. Soldiers' Memorial Society, memorial building, three stories, brick and stone, with slate and tin roof, 95 by 135 feet, cost $60,000 (foundations — no contracts yet). Calvin Cone, frame residence, cost $4,500 (projected). Champaign Co., jail and sheriff's residence, two stories, brick and stone, with slate and tin roof, 40 by 100 feet, cost $30,000 (near completion); John Benson, contractor. Baptist Church Society, Urbana, O., church building, one-story auditorium, 36 by 40 feet, with lecture room adjacent, open timber ceiling, pastor's study, 30 by 32 feet, brick and stone trimmings, cost $16,000 (near completion). Erie county, jail and sheriff's residence, three stories, stone, cells (24) and corridors steel, 45 by 110 feet, cost $50,000 (near completion); Feick Bros., contractors. Kling Bros. & Hone, Marion, O., four-story hotel with annex, brick and stone, with terra-cotta trimmings and tin roof, 60 by 158 feet, cost $60,000 (near completion); Bever & Butt, Dayton, contractors. Fayette Co., jail and sheriff's residence, brick and stone, with tin roof, 40 by 90 feet, cost $18,000. Court-house, three stories, stone and fireproof, with tin roof, 85 by 110 feet, cost $95,000 (in course of construction); North Bros. & J. Lichtenberg, contractors. Eaton Co., Mich., court-house, three stories, brick and stone, with tin roof, 80 by 100 feet, cost $50,000 (in course of construction); Miles, Cramer & Horne, contractors. Eaton, O., high school building, three stories, brick and stone, with slate and tin roof, 80 by 90 feet, cost $40,000 (in construction); W. McCabe, contractor. Marion Co., court-house, three stories, stone, fireproof, 85 by 110 feet, cost $100,000 (in construction); E. W. Mitchell, contractor. Ionia Co., Mich, court-house, three stories, brick and stone, 75 by 110 feet, cost $50,000 (projected). Butler Co., O., infirmary, three stories, brick and stone, with slate and tin roof, 120 by 160 feet, cost $100,000 (projected). A. J. Stoll, Sandusky, O., residence, brick and stone, with terra-cotta trimmings, cost $12,000 (projected). Geo. F. Conan, Camden, N. J., residence, brick and stone, with terra-cotta trimmings, cost $10,000 (under way). Galion, O., public receiving-vault, stone, cost $3,500 (projected). H. M. Weaver, Mansfield, O., residence, brick, with slate roof, cost $12,000 (near completion).

Prices of Material.

The prices paid for building material in Chicago, St. Louis and Cincinnati are as follows:

Brick (common)—Chicago, $7.50 to $8; St. Louis, $18; Cincinnati, $18. Pressed—Chicago: Indiana, $16 to $28; Anderson pressed, $25 to $40; ornamental, $100 to $300; enameled, $100 to $125; St. Louis, $40; Trenton, N. J., $45; Baltimore, $55; Milwaukee, $26; Philadelphia, $48; enameled English, $130 to $200.

Stone—Chicago: Blue Bedford, 65 cents (square foot); Lamont, 50 cents; Joilet, 50 cents; sandstone, $1.50; Greenstone, 85 cents; Dimension, 25 cents; Ruhel, $9.50 per cord. St. Louis: Warren stone, "blue," 85 cents; "white," 75 cents; Rubel, $1.65 to $1.90 per perch.

Cement—Chicago: Portland, $3.25 to $3.50; Utica, $1.25; Milwaukee, $1.40; Louisville, $1.25.

Lime—Chicago, 75 cents to $1 per barrel; St. Louis, "Glencoe," 30 cents per bushel.

Sand—Chicago, $2.25 to $2.50 per cubic yard; dock sand, $2 per cubic yard; St. Louis, $2.75 per cubic yard.

Plastering Hair—Chicago, 35 cents to 40 cents per bushel; St. Louis, 35 cents.

Plaster of Paris—Chicago, $2 per barrel; St. Louis, $2.25.

Nails—Chicago, $3.50 to $6.35; St. Louis, $6.75.

Lumber—Chicago: boards, $37.50 to $47.50; framing timber, $12 to $20; shingles, $2.90 to $3.10; lath, $2.60. St. Louis: Lumber a little higher than the Chicago market.

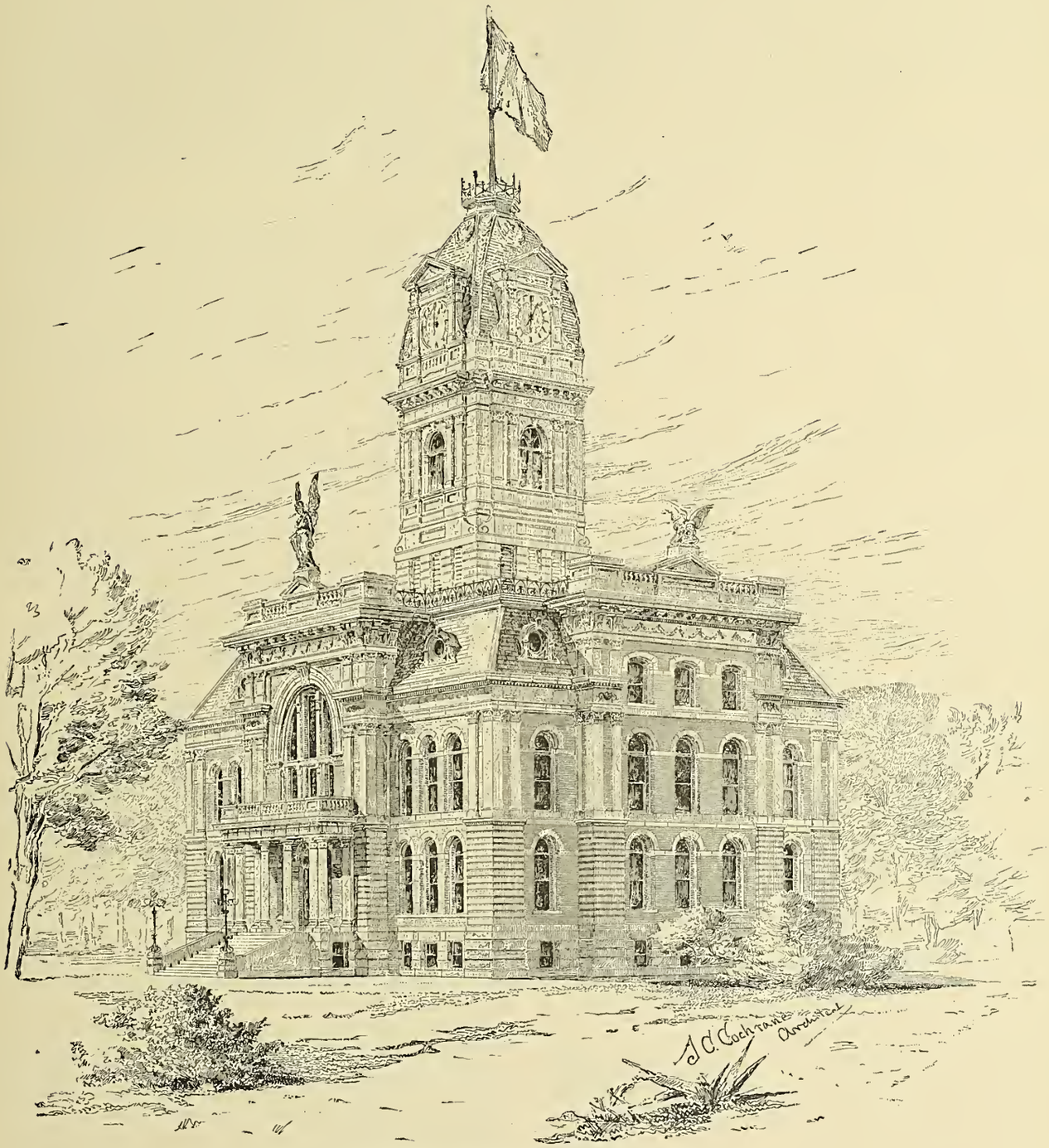
Plastering at St. Louis, for three-coat work, 30 cents per yard; laid off work, 28 cents per yard; all framework, 35 cents per yard; laid off framework, 33 cents; cornice, superficial work, 28 cents; gray finishing, 2 cents extra per yard on above prices. Plasterers are obliged to pay the city ½ cent per yard for all water used.

Our Illustrations.

Page 91, Residence of Architect E. E. Myers, on Woodward avenue, Detroit, Michigan, and first and second floor plans.

Page 95, fragments from Chicago architecture, sketched by Cicero Hine, from striking features of Chicago buildings, and representing the work of leading architects.

Page 97, Court-house, Porter County, Indiana, at Valparaiso, by John C. Cochrane, architect. It will be built on the public square, replacing the building formerly used, and will be an imposing edifice. The design is for a building 88 by 118 feet, 72 feet to top of the roof, which is surmounted by a central tower, 30 feet square and 93 feet high, making the top of the tower 165 feet from the ground. The walls will be built of cut stone from the Ellertsville quarries. There will be two entrances, front and rear, with six-column porticos, reached by steps 26 feet wide. The interior will be finished in hardwood throughout, and will contain the usual offices, court-room, etc. The basement is 10½ feet high, the first story 18 feet, second story 18½ feet, except the court-room and rotunda, which are 26 feet. The cost of the structure will be about $126,000. When this structure is finished Porter county will possess one of the finest court-houses in the state.



COURT-HOUSE AT VALPARAISO, IND.

Architectural Notes.

Peru, Ind., has over forty houses under construction at the present time.

St. Paul Church, Milwaukee, a beautiful and massive structure, is to cost $150,000, not $15,000, as stated in July number.

Hon. Chas. B. Farwell has changed the plan of his house, and Anderson pressed brick is used as material instead of stone, as was first proposed.

Messrs. W. D. Kerfoot & Co. have let contracts for the construction of ten more cottages such as those which they erected last spring on West Chicago avenue, making thirty houses, including the above.

Architect F. Wm. Fieder is constructing for R. W. Rathburne three houses on Washington boulevard, and plans for several out-of-town parties, including working drawings for a summer cottage at Lake George.

The Syndicate Block in Minneapolis, one of the finest mercantile structures in the state, and which contained, besides stores and offices, a handsome theatre, was recently damaged by fire to the extent of $100,000.

Between Liverpool and Steubenville, on the Ohio river in Ohio, there are sixty-three firms engaged in making firebrick and drain-tile. The bed of firebrick-clay averages nine feet in diameter, and is of superior quality.

Architects Barber & Barber, of Winnepeg, Manitoba, are erecting at that city a new church edifice for the Knox Presbyterian church congregation. The church, it is understood, will be one of the finest in Manitoba.

A new kind of material for roofing has been discovered at Fort Worth. The *News* says: "Maj. Twombly is roofing his new building with characteristic energy." We hope the new material will come into general use.—*Texas Siftings.*

Architect W. L. B. Jenney has prepared plans and awarded contracts for residence for Mrs. Harriet B. Hall at No. 22 Walton place. The building will be faced with Anderson pressed brick, and the style will harmonize with the adjacent house.

James Connors, an Evanston contractor, is building a residence for George Lord, to be finished September 15, three months from date of contarct. Burnham & Root are the architects. Also a residence at Winetka for S. O. Smith, of which Edbrooke & Burnham are the architects.

Mr. J. J. Lockwood has received the contract for supplying St. Louis hydraulic pressed brick for the new Pullman office building. This building will consume more than 300,000 brick in its construction. Mr. Lockwood will also supply 200,000 St. Louis brick for the Commercial Safe Deposit Company's building.

Architect Normand S. Patton is about to construct a chapel on Sedgwick street for the New England Congregational church, for the accommodation of a Sunday school and a Kindergarten during the week. The plans include many ingenious devices for the proper utilizing of all the space, and special provision is made for efficient lighting and ventilation.

It is reported that Dennis Ryan is about to erect a hotel in St. Paul, Minn., at a cost of $1,000,000. It will cover a block on Robert street, between Sixth and Seventh streets. The citizens have given him a bonus of $270,000. This is St. Paul's Roland for Minneapolis' Oliver, and, if our information is authentic, when completed these cities will possess two of the finest hotels in the West.

The residence of Mr. H. A. Allyn, at Evanston, was burned on the 14th ult., a stove causing the fire. The roof and sides of the building were covered with the double iron fire-proof metallic shingles, handled by Messrs. H. A. Allyn & Co., Chicago, and, while the interior was completely burned out, the exterior or shingle covering remained sound and intact, demonstrating the fireproof quality of these shingles.

A system of steam heating that is becoming quite general is being introduced in the remodeling, by Cobb & Frost, of the old L. Z. Leiter residence on Calumet avenue, recently purchased by John B. Drake. This system is introduced by Baker, Smith & Co., of Chicago, and consists in the placing of the boilers in the barn and connecting with the residence by underground pipes packed in asbestos and thoroughly insulated.

Architect George A. Masters has completed the remodeling of Haverly's theater, having originally largely to do with the designing, though another was its reputed architect; when the management decided upon certain changes Mr. Masters was chosen, because of his intimate knowledge of the plans, as well as his ability as a theatrical architect. The entire front exits have been changed; the seating re-arranged, as well as the proscenium boxes, and other features introduced to the general improvement of the auditorium.

H. M. Hanson has designed a handsome double residence in modern Gothic, at the corner of Clark and Wisconsin streets, for A. Olsen, in charge of E. S. Dwyer. It will be cellar, two stories and attic, with rock-faced foundation, and superstructure in brick, ornamented with panels, courses, and gables in red terra-cotta. The dimensions will be 58 by 57; also a three-story and cellar flat-arranged building at No. 39 Ray street, for E. Nelson. This will be 60 by 25 feet, with three flats, each with six rooms. It will cost $9,000.

Architect Edward Bauman has drawn plans for a nice residence for Col. J. S. Wilson, to be erected on Deeming court, just west of Clark street. The house will be two stories, basement and high attic, and in size will be 36 by 71 feet. The three walls will be of Chicago pressed brick, and the front will be attractively trimmed with brown stone and terra-cotta. This architect is also building two residences for C. H. Blair, on Prairie avenue, near Twenty-ninth street, both three stories and basement. The material used is Trenton pressed brick fronted with terra-cotta and stone trimmings, being 46 by 74. The first floor contains four rooms for each house; cost when completed, about $30,000.

The five-story building recently completed for the Canada Life Assurance Co., at Hamilton, Ontario, is a structure of which the company and all Canadians may well be proud. It is built of Connecticut brown stone, with semi-Gothic roof and turrets at the corners, and the main corner surmounted by a clock tower. The interior of the general offices exhibits some magnificent carving, by a Mr. Hicks, of Hamilton, at a cost of over $20,000. The carving is in cherry and mahogany, and is placed in panels on the ceiling and in cornices, columns, etc. The private apartments of the company are of equal elegance, and, as a whole, this interior has no equal in Canada. Architect White, of Buffalo, designed the building.

The lot adjoining the new Commercial Safe Deposit Company's building on the south, which belongs to the Brooks estate, about which so many rumors have been circulated, and all sorts of clubhouses, theaters, etc., have been built in people's minds, by telegraph and by the daily press, is not to be built upon at present. At least it is authoritatively stated by the agent of the property, Mr. Owen F. Aldis, that the property will only be leased to thoroughly reliable parties, and for the purpose of erecting upon it a substantial office building. This lot like that upon which the bank is being built, remains under the control of the agent in so much that his approval of all plans of building must be secured before the ground can be built upon.

The ability to move heavy brick buildings along streets, turn corners, etc., without danger to people or damage to buildings, is illustrated by a recent moving in Chicago: A party has completed the moving of a three-story brick building, twenty-four feet front and sixty-five feet deep, from its original site on the north side of Taylor street, fronting east on Dearborn street. The building was first moved diagonally to the center of Taylor street, then west on Taylor street about 200 feet, where it was made to perform a quarter of a revolution and placed upon its new foundation, with its former east front facing south. This movement of a heavy brick structure without injury is a remarkable achievement, but is not uncommon in Chicago.

Architect I. C. Zarbell is building two blocks of thirteen houses each, situated upon both sides of Bissell street, between Webster and Garfield avenues, for John T. Davis. They are two stories and basement in pressed brick. The basements and first floors rent together or separately. Twenty are arranged in double houses, and six in blocks of three each. The expenditure will be $125,000. Also a double three-story and basement building at the corner of Winchester avenue and Van Buren street for William Maar. It will contain six flats of seven rooms each, and will cost $14,000. For Arnold Brothers, on Irving place, between Jackson and Adams streets, three two-story and basement pressed brick dwellings, six flats, costing $12,000.

The high-school building at St. Paul is nearing completion. It was designed by D. W. Millard, the architect of the school-board, and will cost $100,000 when completed. The contractor for the construction was A. D. Desporais; for the foundation, Breen & Young; for the steam-fitting, J. L. Fox & Co., and school furniture, the Union School Furniture Co., of Battle Creek, Mich., the total contracts let being $92,800. The building is 156 by 128 feet, is semi-gothic in style, and is surmounted by a tower 140 feet high from the street level. The materials used are Kasota stone for foundations, and red brick and stone trimmings for superstructure. The sewerage, ventilation and heating have been thoroughly attended to upon the most approved methods.

The customhouse and postoffice now under construction at Hamilton, Ontario, is to be the finest government structure in Canada, excepting the Parliament buildings at Ottawa. The general style is a modern Gothic. The structure will be five stories in height, with exceedingly massive walls built of a light-brown sandstone, quarried in the Crédit valley, near Toronto. The architect is well known to the profession on both sides of the line, being the architect Fuller who designed the capital building at Albany, N. Y., and who, as the architect for the Canadian government, designed and constructed the Parliament buildings at Ottawa. Brown & Low, of Toronto, are the contractors for the stonework, and Mr. Eli Van Allen is the carpentry contractor, while Mr. George Sharp, one of the oldest and most experienced contractors in Canada, is the government inspector. The estimated cost of the structure will be about $200,000.

Architects Adler & Sullivan have commenced work at Aurora upon a mammoth factory for the Aurora Watch Co. The buildings will have a frontage of 320 feet. The main building will be four stories in the center, with three-story wings. The center portion is 50 by 89 feet, and each of the wings is 36 by 135 feet. The machine shop is 35 by 95 feet, the boiler house 35 by 65 feet, the dial-house 32 by 89 feet, and the stack 12 feet at base and 125 feet in height. The architecture is massive and symmetrical. In the construction the eastern system of solid timber floors will be used, and fans and the stack will be used for ventilation. The company proposes to profit by the experience of other manufactories, avoiding defects, and improving upon the better points of other factory buildings. The buildings will be completed in about two years at a cost of over $100,000. Also a three-story and basement residence, 33 by 76 feet, with brown-stone front, in original design, for M. Selz, at 1719 Michigan avenue, to cost $28,000.

A new firm in the hardware line whom architects and builders will be glad to know is Messrs. Bullard, Gormley & Blackburn. Messrs. Bullard & Gormley have been known to the hardware trade of Chicago for a number of years, and Mr. Blackburn is the son of Captain Martin Blackburn, well known in marine circles. They are worthy of the fullest confidence of the building public, and should receive that recognition which their enterprise and knowledge of the hardware business warrants, and we bespeak for them the filling of a fair share of the contracts our growing city calls for.

Lumber Notes.

SHAVINGS of veneer of different kinds of wood are coming into vogue in England for book-covers.

LUMBER, perfectly clear, can be cut from redwood, 5 feet wide and from 10 to 20 feet in length.

The Bay City *Lumberman's Gazette* estimates the shortage of the mill cut on the Saginaw river to be 250,000,000 feet.

DURING the past two months there have been entered at the Government land office at Jackson, Miss., 178,000 acres of pine lands.

BROWN BROS. & Co., lumber dealers and insurance agents at Detroit, Mich., assigned Monday. Liabilities, $100,000; assets half.

SOUTHERN forests are being cut down at such a rate, it is feared if continued it will change the entire normal climatic conditions of portions of Florida, Georgia, Alabama and Mississippi.

HICKORY, dogwood and persimmon, which a short time ago was almost worthless in North Carolina, is now in demand at $6 per cord for sawing into blocks for the manufacture of power-loom shuttles.

IT is estimated the standing pine beyond the headwaters of the Pike, a tributary of the Menominee, in Wisconsin, amounts to 1,500,000,000 feet. It is at present inaccessible to a driving stream and must be reached by rail.

THE entire white pine growing in the United States and ready for the axe is estimated not to exceed 80,000,000,000 feet, and this includes inferior trees, which a few years ago would not have been taken in an estimate.

THE log drives in the Chippewa and Black River pineries have been virtually abandoned. The water in the main rivers has receded to such a stage to have kept the crews would have been a waste of time. There is now at least 250,000,000 feet of last winter's cut hung up.

THREE million and a half feet of Southern yellow pine lumber were recently sold in New York city on three contracts. Two and a half millions of the amount will be consumed in 112 buildings, to be erected on the Isthmus of Panama for the Lesseps Canal Company, which are made in New York.

THE State mineralogist of California estimates the quantity of lumber cut each year in California and shipped eastward at 70,000,000 feet. Cordwood is shipped in about equal quantity. Notwithstanding this cutting the replenishing goes on at a ratio that no lacking is feared. There are millions of acres of timber on the mountain ranges.

THE Bay City *Lumberman's Gazette* says a river jammed full of logs for forty miles is no uncommon sight in Michigan, that the river from Alpena to Hillman is just in such a condition at present. Before snow flies they will have all been subjected to the dissecting process of the circular, gang and edger, and probably be under distribution.

Personal Gossip.

ARCHITECT C. S. FROST, of the firm of Cobb & Frost, is taking a trip to Dakota.

JOHN COLWELL, well known throughout Illinois as a building contractor, has been adjudged insane at Ottawa. He was refused admission to the asylum at Elgin.

J. W. KEPLINGER, a St. Louis contractor, was severely injured recently by falling a distance of fifty feet from the roof of an opera house in process of construction at Fort Worth.

ARCHITECT J. M. VAN OSDEL has left the city to spend a few days in Pennsylvania, and will visit the beautiful lake of Chautauqua, in Chautauqua county, N. Y., the birthplace of his wife.

MISS WHITE, the sister of a Kentucky member of Congress, who has been employed in the office of the supervising architect of the Treasury, has resigned her situation to go abroad and pursue her architectural studies.

T. L. JOHNSON, the representative of the architectural and engineering supply house of Keuffel & Esser, of New York, was in the city during the week upon an extensive tour through the cities of the Northwest. Mr Johnson is welcomed wherever he goes as the gentlemanly representative of a popular house.

THE members of the Chicago Builders' Exchange recently expressed their approval of the manner in which their secretary, Mr. Earnest C. Prussing, conducted the affairs of the association by presenting him with a valuable diamond pin. The president, Mr. Wm. Tapper, and treasurer, Mr. Gobel, were each presented with a gold-headed cane.

MR. HENRY BUTMAN, who is well known in the West as a representative of the works of Dewitt & Sons, has taken the management of the western office of the Clinton Wire Cloth Company. The architects and builders of the West will find in Mr. Butman a gentleman of pleasing address and business integrity, one well qualified to represent his house in the West.

IRVING K POND, who as general superintendent and draughtsman under architect Beman, at Pullman, for the past two years, has become well known to the profession, sails for Europe about September 1. Mr. Pond has planned an extensive trip. During the next three months he will be in the south of Europe, then continuing in the north, will study the architecture of the continent, old and new.

W. H. BARKER, the western representative of two Pittsburgh publications, writes, asking that his identity be not confounded with that party using the same name who has been swindling the "INLAND ARCHITECT AND BUILDER," and other journals at St. Louis. Mr. Barker writes us that his appearance does not tally with our printed description of the swindler, and those who know Mr. Barker will not be mislead.

WILLIAM DODD, for several years employed in Architect Bemans' office at Pullman, has been placed in charge of the drafting department of the Northern Pacific railroad at Portland, Oregon. Mr. Dodd, like Mr. Irving K. Pond and many others of our most promising draughtsmen, first studied under Architect W. L. B. Jenney, and, developing a considerable talent for designing, was engaged at the Pullman offices in this capacity. His friends will be glad to learn of his promotion, and wish him every success.

F. WM. FIEDER, formerly of New York, and for the past two years having charge of all designs made for cars built by the Pullman Palace Car Co., has severed his connection with the company, and has opened an architectural office at 113 Adams street. Mr. Fieder is a gentleman who represents the growing architectural talent in Chicago, being one of the many young, enterprising and talented architects who have recently located here, giving to architecture a new impulse, and as such merits the recognition of the profession and the public generally. One of Mr. Fieder's specialties is the sketching of special designs in furniture.

General Notes.

C. F. RICE is making a very fine display of pier and mantel mirrors.

O'BRIEN BROS., painters, are finishing the elegant new residence of C. P. Kimball, Esq.

THE Chicago Fireproof Paint Co. have removed from 86 Washington street to 89 Randolph street.

THE mantel, grate and fire-set firm of Albert A. Riley is making a specialty of imported English raised work and fine tiles.

THE contract for furnishing standard furniture for the courthouse and postoffice at Philadelphia has been awarded to A. H. Andrews & Co.

THE stained glasswork exhibited in the new store of Hannah & Hogg is extremely rich and artistic in design. Messrs. Kinsella & Haywood executed the work.

JONES & STEBBENS have made arrangements with Hopkins & Dickinson Manufacturing Co. to handle their hammered bronze trimmings and also their basket patterns of bronze.

CORRETTI & HOGAN, the fresco artists, are doing good work in Chicago. Mr. Corretti is well known as an artist of the Italian school, and his work is always thorough and artistic.

R. E. DEWEY & Co., manufacturers of galvanized iron cornices, have removed to their new quarters corner Quincy and Clinton streets, and are busy with city and country orders.

MESSRS. SHIELDS & BROWN, the proprietors of the Bradley insulated covering for steam pipes, boilers, etc., received the silver medal for that material at the late railway exposition.

A HANDSOME and well-executed sign has been painted by Barry & Son for the Chicago agency of the American Watch Co. It is 6 by 11 feet, and the ground is gold with black lettering.

AT the recent railway appliance exposition Messrs. Coffin, Devoe & Co. received the gold medal for their railway car body colors, beside several other medals of lesser importance.

GEO. E. WEIR, the looking-glass manufacturer, is getting out many new designs, and will issue a new catalogue the 1st of September. His French and German plates he imports direct.

INDICATIONS are not wanting that a good fall trade will be enjoyed by the painters and paperhangers. J. McDermott reports several large contracts for fall work, both in painting and frescoing.

AN attachment which is said to be effective in preventing water beating under outside doors is called Wood's combined door and weather strip, and is made by the Howard Manufacturing Co., of Chicago.

A CORRESPONDENT inquires the prices of different pavements. The average price per square yard is as follows: Wooden blocks, $1.20; sheet asphalt, $2; block asphalt, $3.13; granite, $4.34; macadam, $1.25.

E. BROWN & Co., the photo-engravers, are competing successfully for eastern as well as western business. Their reproduction of architectural designs and perspectives is certainly equal to the best in the country.

HUGHES & SON, contractors, are building for M. Donehue, on Adams, near Jefferson street, a four-story building with store below and flats above; also a large residence for Thos. Connelly on Polk and Loomis streets, which will receive an elegant interior finish.

MESSRS. ORR & LOCKETT, who are the sole agents in Chicago for the Norton door check and spring, which has lately been changed in many particulars, have recently placed forty-one of them on the doors of the new C. B. & Q. railway offices, and they are giving excellent satisfaction.

MUCH of the Utica cement used in the foundations of our large structures is procured through the agency of Meacham & Wright—all of that used in the foundations of the new Pullman office building, the Commercial Safe Deposit Co's building, and the Board of Trade being furnished by them.

RENTON BROS., New York, are handling the Thomas Kelly & Bro's self-acting closets and stop and waste cocks, at 24 Williams street. A shipment was made the past week of nickle-plated and all crockery tanks for a fine residence there. They also have agencies at Rochester, Utica and Syracuse.

THE ornamentation of rooms by the use of mouldings is generally practiced. All kinds of woods are used to correspond with the finish of the rooms. W. H. Fleming, of 113 Madison street, has become known as an authority in the designing of these mouldings, and adapting them to the interior finish.

H. J. MILLIGAN has completed the re-frescoing of Haverly's and Hooley's theaters, and both, particularly in the entrances, are greatly improved, the work being under the direction of the able fresco artist Mr.

M. Hayken. Mr. Milligan is also frescoing the St. Paul German Lutheran church at Michigan City, the masonic hall at La Porte, and enjoys a general busy season.

THE germicides placed in the main water-closets of the Palmer, Grand Pacific and other hotels, are giving perfect satisfaction. The high encomiums of praise from the many citizens using them should induce everyone to give them a trial.

EDW. E. HARBERT & Co. have just finished putting up a private telephone line for the Union Brass Works, connecting their main works with their new forge works; also are now furnishing two new houses being built for Messrs. Borden & Selleck in Groveland Park with electric gas lighting apparatus, burglar alarms and electric bells.

BUSINESS in the cornice works of Messrs. Atkinson & McFarland is booming. This firm did the galvanized iron and slate work on Messrs. E. Jennings & Co's building on West Madison street, and are engaged now on many other fine jobs. Among them are E. B. McCagg's residence and the North Chicago City R. R. Co. new offices.

THE Yale & Towne Manufacturing Company have recently produced a line of hammered bronze door and window trimmings which is a new departure from the old stereotyped patterns generally used for this purpose. They have already supplied many fine houses and buildings with it. It is very choice and durable, and is much admired.

THE manufacture of zinc centerpieces and inside cornice has become one of the standard industries of Chicago. Messrs. Warren Bros. are at present filling a large order for Omaha, and they also have several orders of special designs nearly ready to ship, where ventilation or an unusual feature in construction requires some unique ornamentation.

MCCULLY & MILES are working on some handsome windows for the Plankinton residence, Milwaukee. In the library, Scott's Lady of the Lake is illustrated by medallions in the center of the windows. They have also just completed the stained glasswork for new residence of N. W. Kittson, of St. Paul, and Mr. Babock, of Neenah, Wis.

THE Ruttan Manufacturing Company have men remodeling the entire warming and ventilating apparatus of the State University building at Madison, Wis., State Normal school at Platteville, Wis., State Normal school building, Mankato, Minn., and public school buildings at Cedar Rapids, Independence and Dubuque, Iowa, and DeKalb and Chicago, Ill.

AMONG the fire-escapes erected in Detroit by E. T. Barnum & Co. may be mentioned those on the Newberry & McMillan building, John J. Bagley & Co's tobacco works, Gray, Toynton & Fox's candy factory, the Ryan knitting works, and others. The owners have many strong testimonials stating the advantages of these fire-escapes, their safety and economy.

THE fireproofing of the Chas. Counsellman office building now under way will be most complete. All the walls are of tile, the floor, arches, roof, columns, girders, etc., being covered with this material, and Keene's superfine cement will be used in the foundations. The Ottawa Tile Company have this contract. The painting, glazing and hardwood finishing of this building is let to Theo. Lattan, Jr.

H. A. STREETER, of the Globe Ironworks, is erecting a factory at Nos. 35 to 41 Indiana street four stories high and 75 by 60 feet, to afford greater facilities for his business. He has a contract for the ironwork and roofing on the new water-works which have just been commenced on the north side, east of Chicago avenue, and are furnishing the iron sills, etc., for Jo Daviess county jail at Galena. Architectural iron work is the specialty of these works.

THE Chicago Anderson Pressed Brick Works, destroyed May 13, are again all under cover of new and more extensive buildings, and have commenced turning out new brick. The large stock of brick they fortunately had on hand at the time of the fire has enabled them to fill contracts for 100,000 bricks for the new C. B. & Q. R'y depot at Galesburg, 80,000 for the Merchants National Bank of Cleveland, and numerous other extensive contracts, both at home and abroad.

ACCORDING to remarks on Mexico made at a meeting of the San Francisco Geographical Society, some of the Mexican railways are in some respects more richly built than even the famous New York roads—though not in a manner to give added comfort to travelers. One road spoken of is laid for a considerable distance on ties of ebony, rosewood and mahogany —the latter costing only six bits each. Most of the roads are built at a very slight cost, compared to figures made familiar here by the costly transcontinental roads.

THE Builders' and Manufacturers' Mutual Benefit Association of America, office 194 Broadway, New York, organized by Mr. H. J. Bicknell, the former architectural publisher and now secretary of this company, is, we understand, constantly increasing its membership among builders and others of New York and elsewhere. It is not restricted to architects, builders and manufacturers alone, but it is intended as a general association for all classes wishing insurance on the purely mutual plan and at a nominal rate.

THAT ingenious device known as the Goforth window, by which windows may be cleaned in safety, has become so generally popular, that the company has received orders for their patent appliances for the new Pullman office building, the new City Hall, Board of Trade, Royal Insurance Co., Mortimer & Tapper buildings, and the residence of W. B. Mellens. By this ingenious arrangement of the window frames the window can be removed with little trouble by anyone, and cords can be renewed, panes reset, or any repairs made without the troublesome work of taking out "stops," as in common windows.

THE new catalogue of the hardware firm of Kellogg, Johnson & Bliss, is furnished to parties building in need of something to assist them in the selection of hardware. The firm have just furnished the hardware for many of the finest houses in the city, among which may be mentioned Michael Cudaley's, on Michigan avenue, between Thirty-first and Thirty-second streets, and Calumet Club, on Michigan avenue, etc. They have also a large country trade, and recentry furnished the hardware for the Galveston Seaside Hotel, at Galveston, with over 400 rooms, and also for the finest residence in Waterloo, Iowa, owned by G. A. Whitney.

THE variety of work performed by Messrs. Knisely & Miller, of Chicago, as well as the quality of material being used on prominent buildings, is illustrated by some of the recent contracts of this firm. They have recently taken contracts for the roofing of a residence for W. R. Linn with red slate, including all the copper, galvanized iron and tin work. Burnham & Root are the architects. Also the roofing of the Commercial Safe Deposit Co. building, including copper cornices, etc., and a Hayes skylight, about 70 by 35 feet, of which Jaffrey & Scott are the architects; also new roof of the Chicago Ave. Pumping Works, from designs by city architect Samuel Artingsthall. This roof is to be thoroughly fireproof, consisting of curved corrugated arches, concrete and heavy slate. This firm also furnish for the new Produce Exchange at New Orleans a dome-shaped skylight 22 feet 6 inches in diameter.

ONE of the systems of house-heating coming into favor among leading architects and parties competent to judge of its merits, is Hawley's new system of heating by hot air radiators, combined with his improved system of house construction. An inspection of the method as now being introduced in the magnificent residence being built for J. V. Farwell on the North Shore Drive shows in brief the pipes, radiators, etc., of the old steam-heating systems reversed and hot air used in place of steam. Fresh air is introduced from the outside, passes through the furnace heater, is carried through the house in brass pipes through radiators in each room, and returned to the furnace again. The improved construction consists of providing for the hot air a thorough circulation between floors, and in such a way as to render each room and story thoroughly isolated from the other —a valuable preventive for the spreading of fire, confining it to the room it starts in. Mr. C. B. Farwell, whose residence is next to that his brother has just commenced, has adopted the improved construction; and the Commercial National Safe Deposit Co's building will be constructed upon this plan, as well as others by others who have examined and convinced themselves of its utility.

Rot in Brick Walls.

IN a recent issue of the *Brick Tile and Metal Review*, a contributor furnishes an article on this important subject, being a condensation of an extended contribution to a German periodical devoted to building interests, by the celebrated German chemist, Herr E. Mueller. As it is a subject that has not received much attention among American householders and builders, and is an important matter, we present the substance of the contribution, avoiding the chemical notations and symbols.

Wall-rot always makes its appearance on the outside surface of bricks as a whitish or dirty exudation, or, where the surface is plastered, the plaster is broken and then thrown off. It results from hydroscopic salts, not at all a decomposing substance. It is merely the consequence of continual moisture in the wall through which a dissolving of the bricks and mortar takes place; so that the operation proceeds not from the outside inward, but in the opposite direction. What is seen on the outside is only the excess of the destructive salts. Such water-attracting and water-containing salts are chiefly: Carbonate of soda, muride of lime, nitrate of lime, sulphate of alumina, sulphate of protoxide of iron. The last two bodies result from the presence of bisulphuret of iron pyrites. In the crude materials used in the manufacture of brick the chief constituent is aluminum-silicate, though rendered impure with carbonate of magnesia, carbonate of lime, protoxide of iron, bisulphuret of iron pyrites, and with organic remains. The conclusion is that wall-rot depends upon the quantity of these substances, and whether there are any other substances in combination that may form destructive salts. To keep this in view is one of the chief points in examining bricks, and to take into account the place and position they are to occupy; also the materials, as sand, water, lime, with which the bricks are brought in contract in the masonwork.

To illustrate: Carbonate of soda brought together with hydroxide of lime, which is nothing else than the dissolved lime present in lime mortar, the carbonic acid of the carbonate of soda passes over to the oxide of calcium, and with it forms the carbonate of lime, while hydrate of soda remains over, and hydrate of soda eagerly attracts water from the atmosphere, and walls which are pervaded with it are constantly moist. The process is quite the same, when instead of carbonate of soda carbonate of potassium is present.

In the foregoing example the cause of the origin of wall-rot lay in the lime of the lime water, with the presence of soda or potash in the brick. In the case of muride of lime the cause lies in the water of the lime mortar, with the presence of lime in the brick, and water becomes injurious where it contains common salt. Salt is a compound of soda and chlorine. The latter combines with the lime, and again a salt is formed which eagerly attracts mortar and deliquesces, and therefore operates destructively upon the wall. If there is no lime in the brick, or only a harmless quantity, then the formation of chloride of calcium takes place in the mortar, and the chloride of calcium has a hurtful effect on mortar. Water containing salt is therefore one of the most dangerous factors for the formation of wall-rot. Sand may contain salt and in such case should be rejected. The presence of chloride of calcium may be confidently inferred when the whitish deposit is perceptible in the joinings and on the edges of the bricks.

Calcareous nitre or nitrate of lime: Saltpetre of commerce is nitrate of potassia, while wall-rot is often nitrate of lime, nitrate of soda, or even nitrate of magnesia. The conditions for the formation of saltpetre are: the presence of decaying substances containing nitrogen, the presence of alkaline earths, ready access of air and porosity of the material, moisture and warmth—all of which conditions rarely lie in the bricks themselves—and nitrogen is the first cause of wall-rot; nevertheless as nitrogen can be introduced into bricks in various ways, as when the bricks contain alkaline substances, and that is very often the case, when they are porous and when

humidity and warmth are present, then the formation of wall-rot is always possible under the above circumstances. The nitrogenous combination operating on bricks may be, first, atmospheric air, which is a combination of nitrogen and oxygen; secondly, water; and finally, earth or vegetable mould pervaded with decaying substances.

Bricks which are made from clay containing bisulphuret of iron pyrites in the burning of them sulphurous acid is formed, which, through taking up the oxygen of the atmosphere, is oxidized to sulphuric acid. But the sulphuric acid again combines partially with the clay to form sulphate of alumina and with the iron to form green vitriol—both of them salts which are hydroscopic—and by constantly taking up water keep the bricks moist. Such clay is perfectly useless for making bricks.

This, in brief, is the exposition of the cause of wall-rot, which would suggest a considerable attention should be paid as to the character of the material used in building, and especially in the manufacture and use of bricks.

Inventive Genius in Building.

280,342. Door-hanger. Wilbur F. Berry, Chicago, Ill.
280,354. Shingle machine. John R. M. Crawford, Booneville, Miss.
280,358. Combined plumb, square and level. William H. Dehney, Rochester, N. Y.
280,374. Mouthpiece for speaking-tubes. Max Heidelmeier, Chicago, Ill.
280,376. Automatic fire-extinguisher. Geo. W. Horton, Cincinnati, O.
280,390. Dividers. William H. Mitchell, Boston, Mass.
280,398. Carpenter's square. Edwin Prescott, Arlington, Mass.
280,400. Sash-fastener. William E. Rines, Arlington, Mass.
280,407. Pile-driver. Jesse P. Seawell, Hope, Ark.
280,415. Mortar tub. John P. Thomas and Daniel J. Thomas, Turner's Falls, Mass.
280,417. Water-closet. William H. Umpleby, Trenton, N. J.
280,419. Safety attachment for elevators. Frederick W. Voerde, Chicago, Ill.
280,432. Drawing apparatus. William S. Worden, Kearney Junction, Neb.
280,440. Lumber-drier. William S. Bates, Chicago, Ill.
280,445. Sash-holder. Russel B. Callahan, Lansing, Mich.
280,448. Faucet. William Cassin, Brooklyn, N. Y.
280,453. Wood-turning machine James D. Craig, Detroit, Mich.
280,457. Crosscut sawing machine. William A. Doherty and Charles G. Van Sickel, Muskegon, Mich.
280,462. Lock hinge. Adolph Gärtner, Jersey City, N. J.
280,488. Combination lock. Henry Lemmon, Guelph, Ontario, Can.
280,492. Ornamental mantel, ceiling, etc. John McCully, Chicago.
280,497. Hand-saw. Thomas U. Mekeel, Cold Spring, N. Y.
280,517. Lock. James Roche, Terryville, Conn.
280,526. Ventilator. George Smart, St. Louis, Mo.
280,539. Device for adjusting roses to doors. George Watkins, Detroit, Mich.
280,545. Grease-trap. Silas Wilcox, Portland, Ore.
280,581. Door-latch. Samuel L. Coales, Newport-Pagnell, England.
280,594. Ventilating apparatus. John Fernie, Philadelphia, Pa.
280,595. Apparatus for ventilating apartments. John Fernie, Philadelphia, Pa.
280,607. Bit-stock. Frank Grant, Chester, Mass.
280,609. Sash-cord guide. Winfield S. Greening, Decatur, Ill.
280,612. Re-enforcing plate for saw-handles. William H. Hankin, Jr., and Cornelius Tinney, Brooklyn, N. Y.
280,643. Sash holder. William C. Mathews, Shenandoah, Iowa.
280,645. Apparatus for hoisting and conveying earth from sewer trenches. Patrick H. McCauley, Des Moines, Iowa.
280,648. Watercloset valve. Timothy McHugh, Cambridge, Mass.
280,668. Steam rock-drill. Joseph W. V. Rawlins, Houghton, Mich.
280,670. Elevator. Frank M. Reynolds and Geo. M. Tewksbury, Newark, N. J.
280,673. Wrench. Carl Schinke, St. Louis, Mo.
280,679. Mortar and building composition. Joseph A. Shinn, Pittsburgh, Pa.
280,681. Roofing. William C. Smalstig and William Massey, Springfield, Mo.
280,706. Spirit-level. Thomas W. Wood, Asbury Park, N. J.
280,728. Door-knob. Charles Elveena, Detroit, Mich.
280,737. Eaves-trough. Joshua P. Gould, Bangor, Me.
280,756. Window-bead fastener. Charles H. Myers, Phelps, N. Y.
280,785. Door. James D. Benson and R. Bruce Fogle, Cranberry, W. Va.
280,793. Pipe-wrench. A. Wells Case, South Manchester, Conn.
280,801. Nail. Henry S. Cushman, Milford, Mass.
280,808. Window-shade roller. Benjamin F. Fox, Philadelphia, Pa.
280,831. Dividers. Carl Johnsen, Christiania, Norway.
280,841. Angle-iron. William Lorcy, Philadelphia, Pa.
280,845. Screw-driver. Angus McLellan, Portland, Ore.
280,877. Door-knob attachment. Oscar Stoddard, Cincinnati, O.
280,892. Sash-fastener. William F. Bailey, St. Paul, Minn.
280,906. Electric fire extinguisher and fire-alarm apparatus. Charles E. Buell, New Haven, Conn.
280,908. Hot-water heating-apparatus. William Burlingame, Exeter, N. H.
280,924. Gong-bell. William S. Foster, Richford, Vt.
280,928. Hand-saw. Herman F. Hoffmann, Torrington, Conn.
280,930. Oral annunciator. Joseph Ireland, Cleveland, O.
280,935. Fastener for meeting-rails of sashes. Hiram T. King, Rochester, New York.
280,957. Fire-escape. Geo. W. Looney, Sr., Rushville, Ind.
289,946. Removable bay-window. Charles A. Nordyke, Cincinnati, O.
280,950. Fastener for meeting-rails of sashes. Geo. E. Parmelee, Circleville, N. Y.
280,957. Fire-escape. Joseph Ripczinski and Charles Tisch, Jr., Wausau, Wis.
280,987. Sash-fastener. William H. Wolfrath, New York, N. Y.
281,016. Safety-stop for elevators. Felix P. Canfield, Boston, Mass.
281,027. Ventilation. William T. Cottier, Napa, Cal.
281,029. Kiln and furnace for burning brick, tile, etc. James C. Culbertson and William A. Eudaly, Cincinnati, O.
281,036. Latch. Henry C. Doughty, Gray, and Daniel Hall, Auburn, Me.
281,054. Door-hanger. William Grace, Chicago, Ill.
281,082. Apparatus for ventilating buildings and chimney-stacks. Arnold W. Kershaw, Lancaster, County of Lancaster, England.
281,086. Spirit-level. Samuel H. Lemon, New York, N. Y.
281,092. Bush-hammer. Henry D. Martin, Ypsilanti, Mich.
281,105. Reaming-saw. Geo. Meyer, New York, N. Y.
281,109. Knob-latch. John Milton, Hamilton, Va.
281,131. Paint-compound. Arthur G. Peuchen, Toronto, Ontario.
281,133. Drain-tile ditch-level. Lyman F. Pontious, Adair, Ill.
281,135. Stone channeling machine. Almire H. Rapp, Paris, France.
281,136. Fire-escape. Henry Rensch, Quincy, Ill.
281,142. Door-lock. Joseph Savoie, St. Marcel, Quebec.
281,148. Pneumatic door-opener. Adolph T. Smith, New York.
281,169. Fire-extinguisher. Caleb C. Walworth, Boston, Mass.
281,181. Automatic fire extinguisher. Christopher L. Delmage, Woonsocket, R. I.
281,198. Fire-proof shutter. Robert P. Manly, Philadelphia, Pa.
281,211. Stone-dressing machine. John T. Turner, Sing Sing, N. Y.
281,247. Key-fastener. Washington Dewey, Chicago, Ill.
281,252. Saw. James E. Emerson, Beaver Falls, Pa.
281,255. Folding or cabinet bath-tub. Franklin H. Fickett and John W. Reid, Chicago, Ill.
281,267. Artificer's leveling instrument. John W. Harmon, Boston.
281,291. Sash-fastener. Henry S. Ohl, Jr., Philadelphia, Pa.
281,308. Parlor door hanger. Samuel Schreffler, Jr., Joliet, Ill.
281,318. Wrench. Benjamin F. Stockford, Sturgis, Mich.
281,326. Malt-kiln floor. Paul Weinig, Hanau, Prussia, Germany.
281,379. Window-sash. Theodore F. Lang, Baltimore, Md.
281,395. Plaster compound for the manufacture of stone, tile, etc. Emile Pick, Paris, France.
281,433. Sliding door. Alvah P. Beard, Horseheads, N. Y.
281,447. Saw-handle. Frank A. Buell, Brooklyn, N. Y.
281,456. Sliding-jaw wrench. George J. Cline, Goshen, Ind.
281,458. Sash-holder. William Conner, Missouri Valley, Iowa.
281,467. Fireproof ceiling. P. J. Leonard de Rache, New York, N. Y.
281,504. Door-check. Silas B. Hazen and Geo. L. Van Gorder, Winamac, Ind.
281,537. Door-hanger. Eugene Mack, Addison, Oakland county, Mich.
281,542 Door-check. George G. Matthews and Rudolph Matthews, Wichita, Kas.
281,546. Door-hanger. Henry T. Moody, Newburyport, Mass.
281,549. Fire-escape. William Nack, Sheboygan, Wis.
281,550. Safety device for elevators. Cassius C. Palmer, Oakland, Cal.
281,551. Hot-air furnace. Henry J. Pelstring, Philadelphia, Pa.
281,568. Extension shank for bits. C. Schoch, Truckee, Cal.
281,594. Spring hinge. William H. Williams, Brooklyn, N. Y.
281,615. Lock. Frank S. Clarkson, Baltimore, Md.
281,630. Shutter-worker. Henry J. Hunsicker, Laurelton, Pa.
281,632. Automatic door for elevator hatchways. Michael F. Kidd, Baltimore, Md.

PUBLISHERS' DEPARTMENT.

Chicago Pressed Brick.

In keeping with the enterprise usual to Chicago is the reconstruction of the works of Chicago Anderson Pressed Brick Company. The works of this company were completely destroyed by fire May 13, the walls were leveled, their machinery destroyed, kilns demolished, and the general condition of the plant worse than if it had never been built. The original plant required the best part of a year to place in running order, but, with the aid of exceptionally fine weather, and a determination on the part of both owners and builders to make quick time, the same work has been done in two months and a half, and resumed active operation on the 6th instant. This accomplishment is owing to the energy of the management, as neither money nor labor has been spared to put the works in running order at the earliest possible moment. The growing demand warranting every effort being made for a full preparation for the requirements of this season's unfinished building operations, the company have taken advantage of the experience of the past, and so improved their facilities as to assure greater success in their production. The size of the company's building has been nearly doubled in its area, and has been doubled in capacity. In every department improvements of a greater or lesser extent have been introduced, the speed of machinery increased, and labor-saving machinery supplied. The kiln capacity has been doubled and improved, electric lighting apparatus will furnish light, so that the works may be operated day and night. All these improvements, with a view to that permanency and substantiality which is demanded by an enterprise that has fully demonstrated the successful prosperity that comes to every institution that produces a product that finds a ready market and gives an invariable satisfaction in the result.

New Publications.

CONVERSION OF TABLES OF METRIC AND BRITISH OR UNITED STATES WEIGHTS AND MEASURES; WITH INTRODUCTION. By ROBERT THURSTON, A.M., C.E., etc. New York: John Wiley & Sons, 1883.

Mr. Thurston has rendered a service to engineers and those of other scientific pursuits, by this book, presenting as it does in a compact and convenient form the tables prepared by Capt. Noble, of the English army, and Lieut. Birnie, of the Ordnance Corps, U. S. A., which were prepared with great care by these respective authors for the use of the officers of the armies of the two governments. They form the appendix to Part I of the authors' "Materials of Engineering," and for convenience sake have been reprinted separately.

PHOTOGRAPHS OF CHICAGO RESIDENCES. A collection of twenty-four views of prominent Chicago residences published by J. W. Taylor, architectural photograph publisher, 146 La Salle street, Chicago. Price $12.

To the student of modern architecture, and the general practitioner as well, these views are exceedingly interesting and valuable. Some of the views represent the growing taste for unique and attractive forms in residence construction, and as such are deserving of imitation. While photography cannot give to the architect the reproduction of building interiors, these excellent productions show the value of the art as an accurate reproducing agent for the spreading of correct architectural ideas regarding exterior forms. The collection is one of several series published by Mr. Taylor, and he is deserving of the countenance and support of the architectural fraternity for his enterprise in collecting and publishing the new and valuable in architectural design.

LIFE OF SIR WILLIAM E. LOGAN, K.T., LH.D., F.R.S., First Director of the Geological Survey of Canada. By BERNARD HARRISON, B.A., PH.D. New York: John Wiley & Sons.

The principal work of Sir William Logan was the Geological Survey of Canada. His ability, energy and genial qualities gained him the esteem of the best and most eminent men of science. The style of the book is excellent. Most of the illustrations that are scattered through the book are copies of pen-and-ink sketches from the notebooks of Sir William.

SPECIAL NOTICE.

We would say to parties sending money to this office, that on and after the first day of September, we will not feel obliged to accept three-cent postage stamps in payment for subscriptions, etc., as under the new postal law we cannot use the three cent stamps. One and two cent stamps will be received.

PRICES OF LABOR.

	Bloomington, Ind.	Chicago, Ill.	Cincinnati, O.	Dubuque, Ia.	Des Moines, Ia.	Evansville, Ind.	Fargo, D. T.	Kansas City, Mo.	Minneapolis, Minn.	St. Louis, Mo.	Toledo, O.
Bricklayer	$3 50@4 00	$4 00	$4 00	$4 00	$4 00	$3 25@3 75	$3 50	$3 00	$4 00	$4 00	$4 00
Brickmason (Front)	5 00	5 00	4 50	5 00	.....	4 00@4 50	4 00	4 00	6 00	5 00	5 00
Carpenter	2 00@2 50	2 75	2 75@3 00	2 75	2 75@3 00	1 75@2 00	3 00	2 75	2 50	3 00	2 50
Cabinetmaker	.....	.....	.....	.....	2 75	.....	.....	.....	3 50	3 50	3 00
Finisher	.....	3 00	3 00	.....	3 00	.....	.....	.....	3 00	3 50	3 00
Gasfitter	.....	2 50	2 50	2 50	3 50	3 00@3 50	3 00	3 00	3 50	3 00	2 50
Laborer	1 50	1 50@2 00	1 50	1 50	1 75	1 75@2 00	1 75	2 00	2 00	2 00	1 75
Painter	.....	2 50@2 75	2 75	2 50	2 50	2 00@2 50	2 50	2 50	2 50	2 50	2 50
Glazier	.....	.....	.....	.....	.....	2 00@2 50	2 50	3 00	.....	2 50	2 50
Plasterer	3 00@3 50	3 00	3 00	3 00	4 00	2 50@3 00	3 00	3 00	4 00	4 50	3 50
Plumber	.....	3 00	2 75	3 00	3 50@4 00	4 00@5 00	3 00	3 50	2 75	3 50	5 00
Stonemason	2 50	3 50@4 50	3 50	3 50	3 50	2 00@2 50	.....	3 00	3 00	4 00	4 00
Carver	4 00	4 50@5 00	5 00@5 50	.....	.....	4 00@5 00	.....	.....	4 00	6 00	6 00
Stonecutter	3 50@4 00	3 50	3 50	3 50	4 00	2 00@3 00	.....	3 00	4 00	4 00	4 00
Stonesetter	3 50	3 50	3 50	.....	.....	3 00@3 50	.....	3 50	4 00	5 00	4 50
Roofer (Tin)	2 25	2 50	3 00	2 50	.....	2 00@3 00	3 00	3 00	4 00	3 00	2 50
Slater	2 75	3 50	3 50	3 50	.....	2 50@3 00	.....	3 00	3 00	4 00	2 50
Stairbuilder	3 00	3 25@3 75	2 75	.....	.....	3 00	5 00	3 50	3 00	3 50	5 00
Steamfitter	.....	3 50	3 00@3 50	3 50	.....	.....	3 00	3 00	3 50	3 00	3 50

BUILDING PROPOSALS.

POST-OFFICE.

[*At Winnipeg, Manitoba.*]
DEPARTMENT OF PUBLIC WORKS,
OTTAWA, July 4, 1883.

Sealed tenders, addressed to the undersigned, and endorsed, "Tenders for Post-office, Winnipeg, Man.," will be received at this office *until Wednesday, the 15th day of August next.* inclusively, for the erection of Post-office at Winnipeg, Man.

Plans and Specifications can he seen at the Department of Public Works, Ottawa, and at the Public Works Office, Winnipeg, on and after Saturday, the 14th July next.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted bank check, made payable to the order of the Honorable the Minister of Public Works, equal to five per cent of the amount of the tender, which will be forfeited if the party decline to enter into contract when called on to do so, or if he fail to complete the work contracted for. If the tender be not accepted, the check will be returned.

The Department will not be bound to accept the lowest or any tender. By order F. H. ENNIS,
Secretary.

STEAM-HEATING and VENTILATING.

[*At Lafayette, Ind.*]

Sealed proposals will be received at the Auditor's office of Tippecanoe County, Indiana, at the City of Lafayette, *until 2 o'clock*, P.M., *of Friday, August 17, 1883*, for low-pressure steam-heating and ventilating apparatus, including boilers, pumps, tanks, etc., for the heating and ventilating of the new court-house at Lafayette, Ind., now being built, and for the heating of the jail of said county, according to the plans and specifications, which are now on file in the Auditor's office of said county.

All persons bidding will be required to submit full and complete descriptions of their apparatus with their bids, and samples of their work, so far as the same is practicable.

All bids to be filled out according to blanks to be had o said Auditor, for the use of bidders, and by inserting amounts for work bid for, and without additional conditions and qualifications.

Each bid must be accompanied with a good and sufficient hond in a penalty of fifteen thousand dollars, signed by at least two responsible resident free-hold sureties, according to Sections 4245 and 4246 (Indiana Rev. Statutes, 1881) conditioned that if awarded the work, the person or persons making the said proposal will enter into a contract with the Board of Commissioners of the County of Tippecanoe, and that he or they will faithfully perform and execute the work so hid for, and to the satisfaction of said Board of Commissioners and the Superintendent in charge of said work, and in accordance with and agreeably to the plans, drawings and specifications now on file in the office of the Auditor of the said County, and in accordance with the terms of said contract, to be made as aforesaid, and promptly pay all debts incurred in the prosecution of said work, including labor, materials furnished, and for boarding laborers thereon, and that he or they will indemnify and save harmless the said county of Tippecanoe, from any and all liability to any person or persons, or corporation, and on account of any damage to the property of any person, persons or corporation, arising from any cause whatever, in any way connected with the erection of work so bid for.

Blank bonds may be obtained at the office of the Auditor of said County, and if sureties do not reside in Tippecanoe County, their goodness and sufficiency, beyond any doubt, should be certified to by the Clerk or Auditor of the County in Indiana where sureties do reside. Said sureties are required to reside in the State of Indiana.

Copies of Specifications and any additional information in regard to the proposed work may be obtained of James F. Alexander, Superintendent, Lafayette, Ind.

The Board of Commissioners reserves the right to reject any and all bids, if in its judgment the interests of the County should require.

By order of the Board of Commissioners of the County of Tippecanoe. THOMAS J. BARNES,
Auditor.

FIRE-ESCAPES.

[*At Columbus, Ohio.*]

Sealed proposals will be received by the trustees of the Ohio Institution for Feeble-minded Youth, at the office of the Superintendent, *until Thursday, August 16, at 12 o'clock noon*, for work and materials required for the construction of fire-escapes.

Plans, specifications, and detail drawings can be seen at the office of the Superintendent at the Institution.

All proposals will be directed to M. A. Daugherty, President of the Board of Trustees, and endorsed "Proposals for Fire-Escapes."

The Board reserves the right to reject any or all proposals.
M. A. DAUGHERTY,
President Board of Trustees.

HOSPITAL FOR THE INSANE.

[*Kankakee, Ill.*]

Sealed proposals for the erection of buildings, etc., for the Eastern Hospital for the Insane will be received by H. C. Clarke, Secretary, Kankakee, Ill., *until 2 P.M. August 30, 1883.*

Drawings and specifications can be seen on and after August 6 at office of James R. Willett, 94 La Salle st., Chicago.

The right to reject any and all bids is reserved.
JOHN L. DONOVAN,
President Pro. Tem. Board of Trustees.

SCHOOL-HOUSE.

[*At Auburndale, Mass.*]
CITY-HALL, WEST NEWTON, MASS., July 24, 1883.

Sealed proposals will be received at the City-Hall, West Newton, by the joint standing committee on public property *on or before 12 o'clock noon, Saturday, August 11, 1883*, for the erection of an 8-room school-house at Auburndale. Plans and specifications can be seen at the office of J. Foster Ober, architect, 15 Pemberton square, Boston, Mass., after July 28, 1883. Proposals are to be addressed to "James R. Deane, Chairman of the Joint Standing Committee on Public Property," and endorsed "Proposals for the erection of a new school-house at Auburndale." The committee reserves the right to reject any or all bids.
JAMES R. DEANE, Chairman.

CITY HALL.

[*At Richmond, Va.*]
CITY ENGINEER'S OFFICE,
RICHMOND, VA., July 19, 1883.

Proposals are invited, *until October 1, 1883*, for furnishing designs for a City-Hall, upon which premiums will be paid as follows: For first-best design, $700; for second-best design, $300.

The city council reserves the right to reject any and all designs.

For information address the undersigned.
W. E. CUTSHAW,
City Engineer.

JOINERS' WORK AND WOOD FLOORING.

[*At Boston, Mass.*]
OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., July 21, 1883.

Sealed proposals will be received at this office *until 12 M. on the 17th day of August, 1883*, for furnishing and fixing in place complete all the joiners' work and wood flooring required for the post-office and sub-treasury extension building at Boston, Mass., in accordance with drawings and specification, copies of which, and any additional information may be had on application at this office or the office of the Superintendent. JAS. G. HILL,
Supervising Architect.

LIGHT-HOUSE IRON-WORK.

[*At Cape San Blas, Fla.*]
OFFICE OF THE LIGHT-HOUSE BOARD,
WASHINGTON, D. C., July 26, 1883.

Sealed proposals will be received at this office *until 2 o'clock* P.M. *of Wednesday, the 15th day of August, 1883*, for furnishing the materials and labor of all kinds necessary for the completion of the metal work of the Cape San Blas and Sanibel Island Light-Houses for the coast of Florida.

Plans, specifications, forms of proposal and other information may be obtained on application to this office.

The right is reserved to reject any or all bids, and to waive any defects. STEPHEN C. ROWAN,
Vice-Admiral, U. S. Navy, Chairman.

R. PHILIP GORMULLY,
MANUFACTURER OF
GALVANIZED IRON CORNICES,
WINDOW CAPS,
VENTILATORS,
FINIALS, ETC.
TIN, SLATE, AND CORRUGATED-IRON
ROOFING,
PATENT FIRE AND WATER PROOF
METALLIC SKYLIGHTS.
228 & 230 MICHIGAN STREET,
CHICAGO.

THE INLAND ARCHITECT AND BUILDER.

Vol. II. No. 2

SEPTEMBER, 1883.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE $1.75 PER YEAR.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

SUBSCRIBERS SWINDLED.

Numerous letters have come to us from New York, Boston, Baltimore, Philadelphia, Albany, St. Louis, Topeka, Denver, and many other points East and West, complaining that the writers had subscribed for THE INLAND ARCHITECT AND BUILDER and not received it. Investigation shows that a swindler named W. H. Gault has been personating in the East and West R C. McLean, editor of this paper, and he has harvested a large number of subscriptions. Gault is rather under medium height, has light complexion, and a peculiar, one-sided appearance of the mouth. In St. Louis a number of subscriptions have been taken by a fraud signing himself W. H. Barker, agent. He is described as being about forty-five or fifty years old, some six feet tall, and with grayish hair and beard, and a smart talker. These men are impostors, and are wholly unauthorized to represent us in any way. Subscribers should insist on canvassers showing satisfactory credentials from this office or from responsible subscription or news companies. If circumstances are suspicious, send subscription direct to this office.

THE Seventh Annual Convention of the American Institute of Architects, held at Providence and Newport on the 29th, 30th and 31st ultimo, appears to have been an unusually interesting meeting. The attending members were the guests of the Rhode Island Chapter, who performed their part so well, supported by the citizens, who threw open their houses to the inspection of the visitors, as to make the occasion a memorable one. The convention assembled at 10 A.M., on the 29th, in the rooms of the Art Club of Providence, where the president, Thos. U. Walter, delivered the annual address. The rooms were hung with designs contributed by the members, many of which were of a very high order. The privilege of studying and comparing these designs constitutes one of the great benefits that accrue from these meetings. Some of these designs were contributed by absentees, members who never or rarely attend—a misfortune as only by such gatherings can be learned what others are doing, and that "the world moves." The most important business of the convention was a change in the by-laws, so as to admit, with proper qualifications, an unlimited number of "Fellows," believing that the influence for good of the Institute will be increased thereby. The afternoon of the first day was devoted to an inspection of the interesting architecture of Providence. In the evening session, Prof. Lanza, of the Institute of Technology, Boston, read a paper on the strength of materials, from actual tests, and gave numerous illustrations. An important result of these tests—made at his Institute last winter—shows the fact that large pieces of timber, say of twelve or fourteen inches high, are not homogeneous, and give results that are materially less than those derived from small pieces, say two inches high, of clear material, and that a co-efficient of safety of ten (10), as usually used, is not too great.

AFTER the morning session, the convention adjourned to Rocky Point, where the members were initiated into the mysteries of a regular "Rhode Island clambake," provided by the Rhode Island Chapter. At 3 P.M. the party embarked for Newport, where the evening session was held. Here, again, the hospitality of the citizens afforded the members the opportunity of inspecting interesting buildings, old and new. Indeed, it may be said, a notable feature of this meeting was the exceptional opportunity for studying remarkable buildings, not only at Providence and Newport, but, also, in the neighboring cities of Boston and New York, which were visited in going or returning, and which cannot fail to be of lasting benefit to those who were so fortunate as to have attended on this occasion. It is to be regretted the Western members take so little interest in these meetings. For the last two years Chicago has been represented by a single architect, W. L. B. Jenney. The question of how to interest the Western members, and induce them to attend the next convention, was frequently discussed, both at Providence and Newport, and the architectural journals and the members of the Institute were requested to do all they can to enlarge the sphere of influence of the Institute. It is worthy of remark, the greater part of the attendance was from the older members of the profession, who feel (experience has taught them) they cannot afford to neglect these conventions. Architecture is a study so much beyond the capacity of one man, that a reunion, conducted by Mr. Walter, assisted by some of the most eminent practitioners, amidst numerous notable examples of ingenuity and skill, cannot be otherwise than of paramount benefit to every architect, and could the lukewarm ones be induced to attend once, they never again would neglect the privilege.

THE interest manifested by the public in the alleged poisonous qualities of what is known as "water-gas" over that produced from coal, has led to considerable discussion by the press. While we would not be considered as championing this new rival to coal-gas, we must confess the arguments adduced in opposition to its adoption seem to us as frivolous as they are absurd. The great evil charged against water-gas is the quantity of carbonic oxide it carries (25 to 30 per cent), one per cent of which, it is asserted, when mixed with common air will produce death. As three per cent of coal-gas, according to the best authorities, will produce exactly the same result, we fail to see the force of the argument against water-gas on the ground of its life-destroying quality, unless it is possible for a man to be more effectually killed by one process than another. Again: If carbonic oxide was the only hidden danger in illuminating gases, ignoring the fact they are made to be combusted, not inhaled, there would be some show of reason in this opposition to water-gas; but, besides others, there are the hydrocarbons, and that terribly explosive compound "marsh-gas" of which coal-gas is shown by analysis to contain double the quantity than that of water-gas, and statistics prove by far the greatest number of accidents, in the utilization of illuminating gas, arise from explosions through the leakage in pipes and meters, while the deaths from suffocation rarely, if ever, occur from such causes, but are the result of gross negligence or ignorance on the part of the victims. We apprehend the real issue in this controversy, wherein the public are most concerned, is not which of the two, water or coal-gas, is the more poisonous, since both, under the same conditions, are equally dangerous, both destroyers of human life,—but which of them is the better for public use in point of economy and illuminating power. If, as is claimed for it, the water-gas has more than double the illuminating power, growing out of the very presence of the large proportion of carbonic oxide in it, and can be manufactured and furnished at a much lower cost than coal-gas, besides being less deleterious on the atmosphere of a room by its perfect combustion, as shown in the non-tarnishing of picture-frames, silverware, etc., then it promises to be the gas of the future until some other better gas or popular illuminator is discovered. Certainly if no other objection can be urged against water-gas than its alleged poisonous nature, that objection must fall before the fact that over twenty European cities and towns have been lighted for years with gas made from wood, which wood-gas contains a larger percentage of carbonic oxide than water-gas does, and there is no record of the question of any special danger being raised where these wood-gases have been and are still being used.

THE question of constructing fire-proof buildings is what may be termed a mooted question, since it is very generally admitted that many representatives of this type of buildings are only approximately fire-proof—that under a severe ordeal they would fail in upholding their pretensions. The growing tendency in all large cities to economize space by the erection of many-storied buildings, particularly in the business centers, is forcing this question upon the earnest attention of architects, contractors and builders, as such structures, if they are not made reasonably secure against fire, are a standing menace to life and property surrounding them. In a recent issue of the *Popular Science Monthly*, Mr. Wm. E. Ward, in discussing this subject, presents some interesting facts and formulas which he conceives to be favorable to an infallible method of fire-proof construction and are well worth perusal. He advocates the combination of iron with béton, or artificial stone, and alleges it has been demonstrated that if iron is well protected by a heavy clothing of béton, its integrity can be depended upon in almost any emergency, while greater strength is added to its proportions by the combination. As the bulk of the components of béton abounds in inexhaustible quantities, always obtainable at a moderate cost, viz, Portland cement, clean beach-sand and crushed bluestone, and requires no particular skill to compound it, only a knowledge of the proportions, and its plastic nature before setting, admits of its being molded into the reproduction of any stone used in masonry, or in stucco, it would seem as if its great strength and fire-resisting qualities, in combination with iron, together with the simplicity of its utilization, furnishes the need of the hour. In the construction of a building under this formula Mr. Ward says the following facts appear to be established by a line of experiments: 1. That a system of iron beams reinforced with béton can be made to sustain weights many times greater than the iron beams can bear without reinforcing. 2. That floors and roofs can be economically made of béton reinforced with iron rods, capable of sustaining heavier loads with a less number of supporting beams than any other system of flooring and roofing, of equal cost, now in use. 3. That the system of reinforced beams and béton floors affords advantages for a more perfect method of heating buildings uniformly than by the steam or hot-water system. 4. That the sanitary requirements of complete ventilation are plainly within the reach of this system of construction. 5. That it affords a perfect defense against the interior destruction of buildings by fire.

NOW that the streets of the city are being generally overhauled and new pavements are being laid, would it not be well for the board of public works to abolish that outrageous system of corner catch basins that have made the corners of streets both unsightly and dangerous for the past twenty or thirty years? Many have been the protests against the system but still it has been practiced. The fact was pointed out by an intelligent citizen when the city grade was first established, that the placing of catch basins in the centers of blocks would drain the streets fully as well, would cost no more, and yet preserve high and level corners to the streets. On the boulevards recently constructed this is done with good results, and even if extra sewers should have to be built, the city should see that it is done before the streets are repaired and thus do away with the present system of dangerous holes and unsightly wooden aprons at every street crossing.

ARCHITECTS in Chicago and throughout the West have been of late years exceedingly busy men; and while this state of things is agreeable from a financial standpoint, still it has not allowed architects to become acquainted and fraternize. Prominent architects with whom we have conversed regret this unsociability, and think that an informal meeting might take place some time during the winter months between the architects of the West. We have long thought some such meeting would result in much permanent good to the fraternity, both individually and as a whole, and cordially invite consultation and correspondence with architects regarding the project.

A DECISION has just been rendered by Judge Van Brunt of the Court of Common Pleas, of New York, which sounds a note of warning to negligent and reckless landlords. A suit for damages for injury to furniture by the falling of a building was brought in the Marine Court, and the jury awarded the plantiff $420 damages; but an order of the general term of the Marine Court reversed the judgment en-

tered upon the verdict. An appeal was taken by the plaintiff to the Court of Common Pleas, as above, where Judge Van Brunt reversed the order of the general term and affirmed the verdict, giving the plaintiff his $420 damages. This would imply that owners of buildings would be liable, under similar circumstances, for other damages, such as injury to persons and loss of life, and if liable for defective buildings, why not for defective approaches, sidewalks, etc., pertaining to premises?

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART VI.—EGYPT (CONCLUDED).

WITH the commencement of the Middle empire Thebes became the capital. The first Theban kingdom was ruled by the eleventh and twelfth dynasties.

The twelfth dynasty is represented by the rock-cut tombs of Beni-Hassan, that are particularly interesting to the architect. These tombs may have been originally built for habitations. Among the Moguls of India the fashion always was, says Fergusson, for a king to build his own sepulcher and use it as a pleasure-palace during his life. It was only after his death that it became the tomb and monument of its founder.

One of the tombs at Beni-Hassan possesses a portico of two pillars, in architecture so like the order afterward employed by the Greeks, as to be aptly named the proto-Doric order.

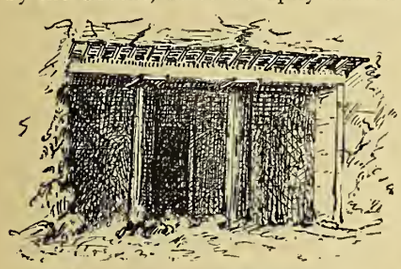


Fig. 1. Tomb at Beni-Hassan.

Furgusson concludes that if the examples at Beni-Hassan are not considered sufficient to settle the question, it will be difficult to refuse the evidence of this one taken from the southern temple at Karnac (Fig. 2), built in the age of Thothmosis III and Amenophis III, say 1600 years before Christ, or 1000 years before the earliest Grecian example known. In this instance the abacus is separated from the shaft; there is a bold echinus and a beaded necking, in fact all the members of the Grecian order, only wanting the elegance which the Greeks added to it.

Mr. Falkner enumerated as still existing in eight different buildings, ranging from the third cataract to lower Egypt, twenty-seven proto-Doric columns.



Is there nothing new under the sun? The Greeks derived their Doric order from the Egyptians; from where did the Egyptians receive it? Violet le Duc thinks it originated with them, and that the stone architecture of the Egyptians was derived from earlier work constructed of reeds and clay.



There grows in Egypt, in great abundance in the marshes, a tall reed with a stiff stem of triangular section, known as the papyrus. (Some fine specimens of this plant are grown in the conservatories of our city parks.)

The early Egyptians made an ingenious use of these papyrus stalks in the construction of their houses. True, none of these buildings have existed for many centuries, still a careful analysis of the pictures on the walls of the temples and tombs, and a comparison of these with existing buildings gives the strongest probabilities in favor of the theories of Viollet-Leduc. These houses were not capacious, for the Egyptians lived mostly in the open air, and they scarcely remained in their dwellings except to sleep. (See "Habitations of Man," by Viollet-Leduc.)

After the plan of the house had been marked out on the ground, bundles of reeds were prepared, fastened together by bands, forming posts. Four of these posts were larger than the others and were placed at the four external angles of the building (illustration, Fig. 3), other bundles of reeds are placed as posts in both the external and internal faces of the walls and tied across the thickness of the wall by bands of rushes. Clay is now prepared and mixed wet, with straw or rushes, and filled in between the rows of posts, and pounded hard, forming the walls of the building. When the wall is raised to the level of the tops of the posts, a sort of trellis-

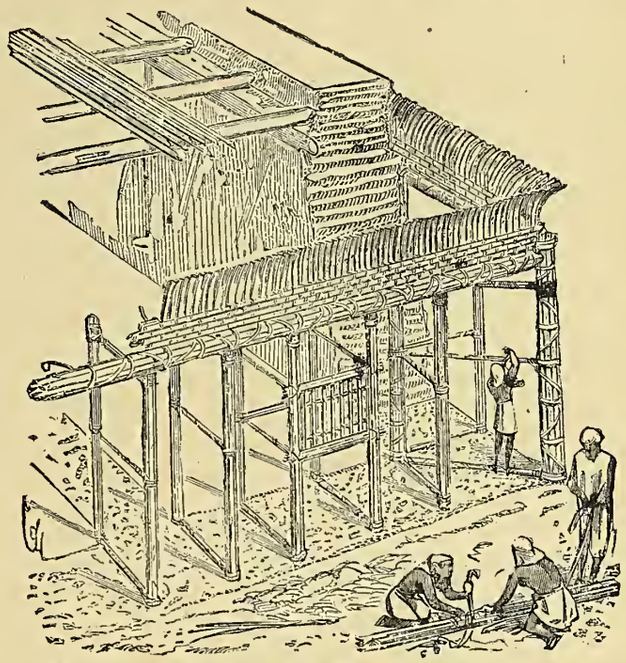


Fig. 3. Building of Primitive Egyptian House. (From Viollet-Leduc.)

work of reeds, Fig. 4, prepared in advance, is placed for a cornice. The close walls are carried up behind, pressing forward the vertical reeds. The flat roof is formed of timbers, as shown in Fig. 3, and covered with well-pounded clay, The building, when completed, will have the appearance of Fig. 5. The characteristic features of the architecture of this

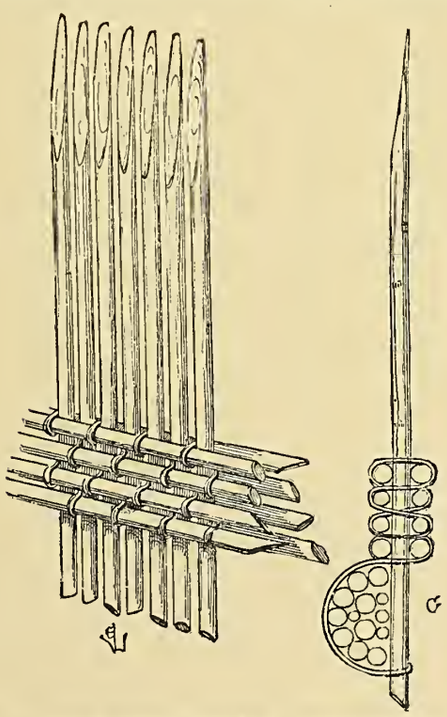


Fig. 4. Structure of Cornice with Reeds. (From Viollet-Leduc.)

primitive house, such as the rolls at the external angles, the cornice and flat roof, were preserved to the last.

CONCLUSION.

The more one studies Egyptian archæology, the more one is impressed with the great antiquity, the immense resources of this wonderful people, the power of the rulers and of the priesthood, the mammoth dimensions of the buildings and the high standard attained in all the building arts, and what is

most surprising, the earliest work of the sculptors, that of the time of the pyramid builders, being never equaled afterward. Menes, the first king 5000 B.C., the emperor Theodosius, the last, 381 A.D., over fifty-three centuries of duration in a single narrow river valley. From whence did they come? From whence did they derive this proficiency in the arts and

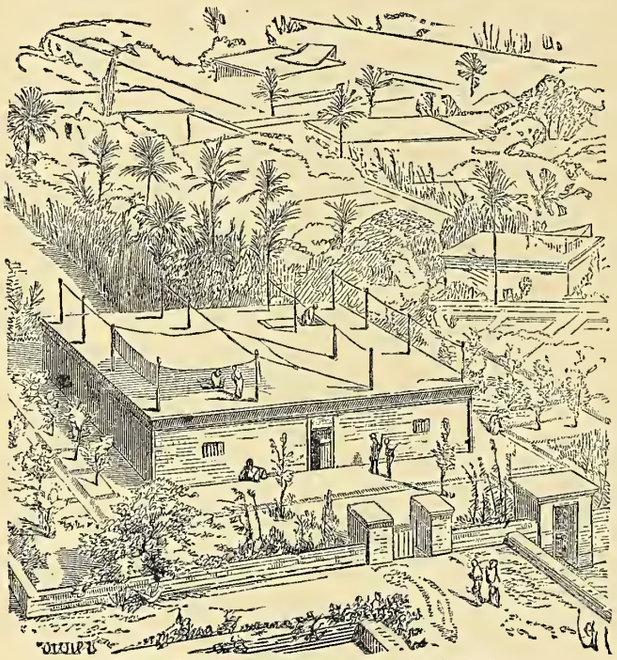


Fig. 5. Early Egyptian House. (From Viollet-Leduc.)

power of government, at such an early date, as to enable the king to build for his own exclusive use the largest edifice ever constructed? There is no ruler today who could build himself such a tomb without causing a revolution and losing his throne.

Their early religion is no less wonderful—preserve the mummy 3000 years, and then an everlasting life of health and happiness. Whence such bold ideas? Six or seven thousand years ago, and that among the most conservative race ever known, a race represented in modern times by the Chinese.

We can ask these questions and many more, but there is much yet to be learned in Egypt and the East before they can be answered. Still the obscurity in which the past is hidden is slowly penetrated by advancing science and the enterprise and self-sacrifice of the explorer. The sites of ancient cities, long buried in the débris of their own ruins, are being dug over, the earth sifted and the smallest jewel or fragment of a terra-cotta tablet is found and preserved.

The public takes much interest in all new finds, and the names of great explorers are household words. In truth, today reputations are made with the pick and the shovel but little inferior to those of the sword.

Art Notes.

THE lecture-rooms of the Union Park Congregational Church have been remodeled and frescoed. The designs are simple and the colors subdued, yet so extremely harmonious that a cheerful effect is given to the interior. The bible and infant-class rooms are divided from the lecture-room by glass partitions, and are also tastefully and harmoniously treated, and it is not surprising that the congregation are somewhat enthusiastic regarding it. H. J. Milligan has done many finer frescos, but seldom one where the pleasing effect and the comments of visitors are so general.

THE examination of some recent frescoes in private residences by Chicago artists and conversation with those well informed develop the fact that while there is much costly work being done in this line, the highest prices go to those artists imported from the East and the poorest class of work secured. Indeed the prevailing sentiment among the artists of New York seems to be "good enough for Chicago," while here the artist is expected to produce his best work for the minimum figure. In brief, the Chicago artist is expected to do a thousand-dollar fresco for five hundred dollars, while the Eastern artist charges and gets a thousand dollars for a fresco that the Chicago man, and in most cases a much superior artist, would be glad to do and get five hundred for. Chicago is too wealthy, too metropolitan, and too independent, to pay fifty per cent for the name of an importation. Her artists are the equals, if not the superiors, of any in the country, and there is no demand that they cannot meet if they only receive the proper compensation.

Art of Pure Color.

JOHN W. ROOT.

(*Concluded.*)

MEAGER as are the results so far obtained by these investigations into the physiological aspects of color, enough has been found to show its drift. It is that each color has a distinct emotional effect, which will be accurately determined, and that this effect is founded upon certain essential phenomena of preceding life, as in the case of red and yellow.

Science has also been busy with optics, regarded from its mathematical standpoint. As a result we have now many optical instruments, and will soon have infinitely more, both developed from present types, and those of entirely different form and purpose.

Take these two classes of facts from the scientific world, put them with the recognized development and possibilities of color in the world of art, and we have the last and perfected phase of this last and greatest art.

Knowing beforehand just what effect each color will have, as well as all its shades and tints, the artist will combine them into new idealized forms with beautiful results; but he will do more than this. The color art will take upon itself forms scarcely dreamed of, and will occupy a place in the lives of artists and art amateurs similar in all respects to that now held by music. What this means we can more fully understand if we analyze the pleasure derived from an orchestral performance. This we find, briefly, to be received from the inherent qualities of tone produced by different instruments; from the various degrees of loudness and softness, from rhythmic or melodic succession of tones, and from combinations of tones based upon mathematical laws.

In "quality" of tone we find a close analogy to color, simply of both the basis is mathematical. The quality of a violin is as susceptible of diagramic illustration as is a face or landscape; and this, with more refined instruments, is also true of colors. Both quality of tone and hue of color have certain definite emotional effect, the blast of a trumpet being no more thrilling than flaming crimson.

In music intensity of tone has its parallel in luminousness of color — a mezzo-tone upon a violin is only pure blue at low pitch. In both music and color rhythmic succession and varied combinations are equally feasible. Fancy, then, a group of optical instruments, each capable of producing a given color in all intensities and in larger or smaller masses; or fancy one composite instrument — like the organ — played by a single performer. There is no musical effect now produced by the orchestra which would not have an analogous color effect produced by these instruments, the only difference being that in one the avenues to the brain is the ear; in the other, the eye. These expressive art forms will demand color composers of the highest rank, whose creations will be as varied as have ever existed or can ever exist in music.

Such an artist will write arrangements of color upon a score, like the notes of music, and we will sit enchanted while a performer plays for us these symphonies. As in the great "Im Walde" symphony by Raff, we hear the twitter of birds, the sighing of trees and all mysterious music of the forest, so in this symphony we shall see the lifting of gray clouds, first rosy streaks of dawn — molten gold poured from the sky into lakes and brooks, and the final coming of Phœbus Apollo. In another symphony we shall see, as in Beethoven's "Eroica," the struggle of the human soul through mists of doubt, through depths of despair, into fullness of day and into greenness of fields and the bloom of flowers.

These symphonies, rondos, sonatas, all will be as crystallized and as infinitely full of purpose as any music now is, and will be played upon optical instruments as perfect as a grand piano, or even a full orchestra. This new art will absorb the full life and energies of future Beethovens and Michael Angelos, while green and callow children will struggle with some future "Maiden's Prayer," whose notes, instead of being wafted into the library to the great swearing of papa, will flash uncertainly and fitfully on the color-screen.

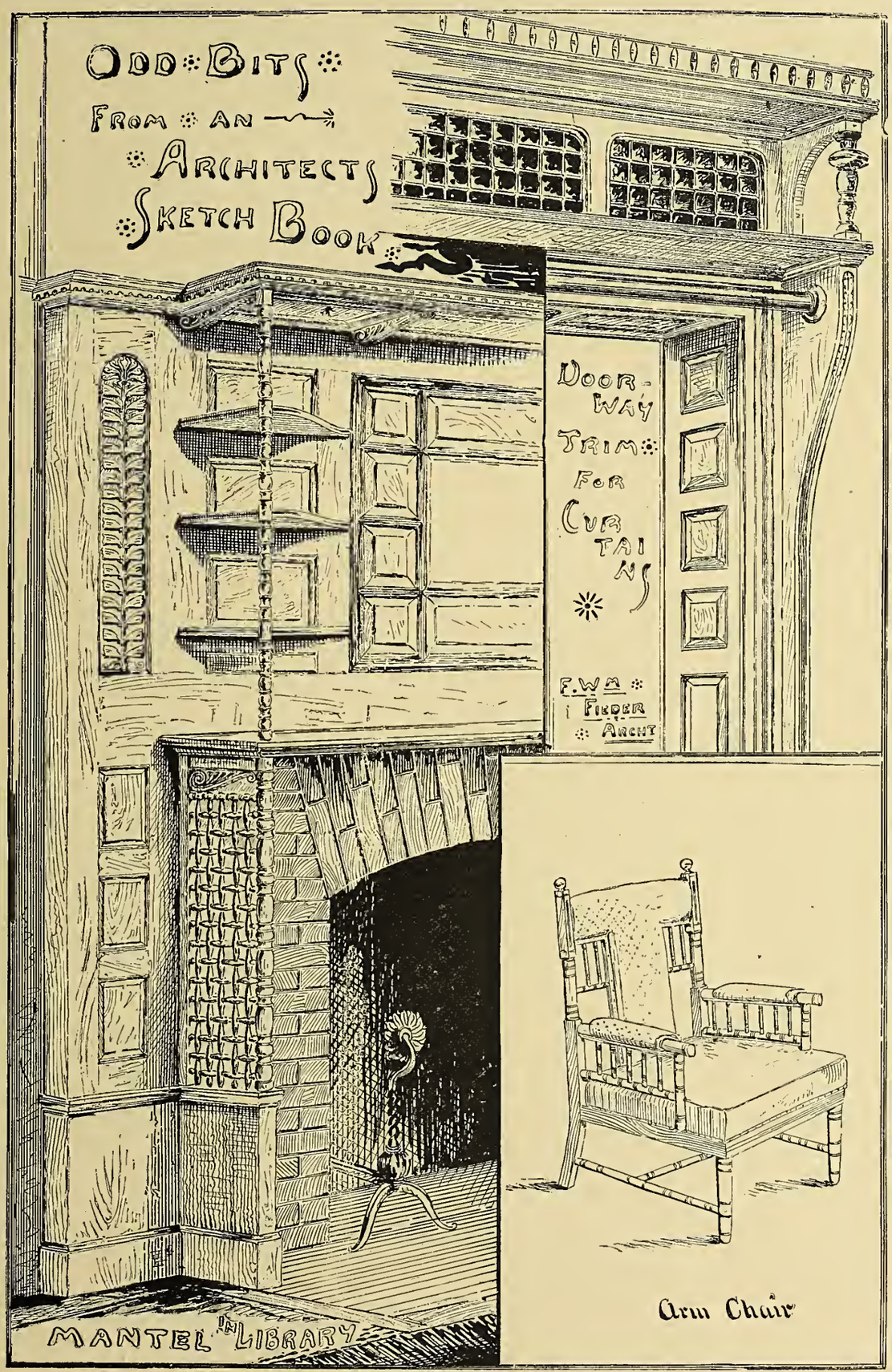
From music will the vocabulary of the art be borrowed, at least till it be grown old enough to have a speech of its own. Indeed it is at present difficult to allude to even the present condition of color without some such borrowing.

For this reason, for their emotional enthusiasm and vagaries, and for the gorgeousness of their attire, the first disciples of the new art will greatly delight the Philistine humorist. These disciples will, however, be only pioneers in a great tidal wave of art, which will force down all barriers and rise rapidly to the flood. With all these pioneers of the art I beg you have patience. They will gush most unduly, they will talk a strange jargon about unknown things, they will dress in strange garments, and have strange notions of morals and art.

Only wait, as does the long-suffering hearer of the "Battle of Prague." Out of this chaos of color the new art will arise as great as music itself. Then will come the complete unification of arts for which Wagner labored, when we may hear "Coriolanus" acted, while to the reds and yellow of brasses, the greens of oboes and flageolets, the violets of 'cellos and the blues of violins in Beethoven's overture, will be added that symphony of color which another Beethoven has written to the same theme.

INSTRUMENTS recorded in the Register's Office in New York city show that Henry A. Morgan, as President of the New York *Times* Association, has purchased from Orlando B. Potter all that portion of the party wall of the *Times* building which is erected upon the property formerly occupied by the *World* building for the sum of $7,426, and that Mr. Potter is now to construct a building to be eleven stories high upon the property at Beekman and Nassau streets and Park Row. This is a heavy price for a few inches of wall.

A COMPANY of capitalists at Chattanooga, Tenn., will, at an early date, establish a large roofing factory at Chattanooga for the manufacture of twenty different styles of roofing.


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A New Decorative Tiling.

One great trouble in the construction of office buildings has been to obtain absolutely durable and fire-proof finish for the interior. This has been especially true in relation to wainscotings and bases about the room. Cement has been used for this purpose made with a polished surface, but in Chicago this quickly becomes dirty and has to be painted. Tiles have also been used, but these are very costly and friable, so that to break off one of them is to underkey the tiles adjacent.

The objection to wood has been that in buildings subject to rough use, as in all classes of commercial buildings, the wood becomes scratched and the finish of it wears off, so that in a very short time all the freshness of the wood has departed, and the cost of refinishing is very considerable. Primarily to obviate these difficulties, the inventors of this method of producing architectural bases and wainscotings have designed to substitute metal for wood. The wainscotings are produced by tiles stamped out of metals, copper, galvanized iron, or other thin metal, and of any pattern desired, and the moulded bases and cap of wainscoting together with the architraves about the doors are made of thin metal drawn through a mould, and in such lengths as may be required. When copper is used the surfaces can be finished in whatever colors are desired, producing any effect from brass to the deepest colors of bronze. Both tiles and architraves are set in a backing of plaster of paris, and are so constructed that no special provision for fasteuing up is necessary, although in the case of moulding additional effect is gained by using ornamental nails of metal, which are driven through into the grounds, and the heads of which, being of various ornamental designs, add considerably to the beauty of the general effect.

The merits of this device are as follows: The bases, wainscoting and architraves so produced are absolutely indestructible. They retain their form perfectly because the soft plaster of paris back of them fills every conformation of the pattern and set in it so as to hold it rigidly in place. It is the most simple process to clean the finish so made, because all that is necessary is a little oil and cloth or else a hose and stream of water. A very artistic effect can be produced in the interior caused from the very great variety of color possible in the metals and the endless varieties combined in the mouldings and patterns of tile used. Although this scheme has been devised for office buildings, it presents many possibilities for private or domestic work as well.

Where the Forests Are.

ACCORDING to the *Industrial South*, the most important of timber regions stretch clear across southern Georgia and Alabama to the rivers that enter Mobile bay. The pine forests of Georgia cover an area of about 11,500,000 acres. North Carolina's wealth in forests is not confined to any one portion of the state, as bordering on the coast one of the extreme eastern counties has an area of forests amounting to ninety per cent of the entire boundary, while some of the western counties give an area of seventy and some sixty per cent of acreage in forest. An excellent authority states that not one-eighth of the forests of Louisiana have been felled, and estimates the timber-lands of the state at 15,000,000 acres. In the peninsula of Florida the yellow pine forests extend over three-fifths of the six counties of Putnam, Marion, Sumter, Polk, Hillsborough and Hernando, embracing 326,277 acres. The wood-lands of Mississippi and Arkansas contain an area of millions of acres. Dr. Loring, Commissioner of Agriculture, who has been attending the forestry congress just held at St. Paul, in an interview with a Chicago *Tribune* reporter, affords a further insight into the area of timber-lands, as well as his opinion as to the lasting qualities of the immense forests of the country, having fully studied the statistics presented. He said investigations recently made show the supply of pine in New Hampshire and Vermont is exhausted and that the spruce lumber, at the rate the cutting is now going on, will last in the former state but seven years, and in the latter but four; in the state of Maine the pine will last four years and spruce fifteen years; in South Carolina the pine forests will last fifty years at the present rate of cutting; in California 150 years; in Arkansas 300 years, in Pennsylvania fifteen years, in Georgia eighty years, in Louisiana 100 years, in North Carolina fifty years, in Wisconsin twenty years, in Michigan ten years, in Minnesota ten years, in Mississippi 150 years, in Alabama ninety years, in Florida thirty years, in Texas 250 years. That the exhausted forests in this list of states can be restored in time there is no doubt, and every means of cultivation and protection should be applied by the people and the government, both state and federal, each in accordance with its own jurisdiction. In addition to this the white pine of Minnesota is estimated at 6,100,000,000 feet, exclusive of isolated timber in birch lands and amid other hardwood growth. In Michigan the estimates for the lower peninsula cover 7,000,000,000 feet; in the Saginaw district, 8,000,000,000 on the streams flowing into Lake Huron, and 14,000,000,000 on those flowing into Lake Michigan. The upper peninsula contains 6,000,000,000 more, making 35,000,000,000 feet in the principal pine districts of Michigan. The great pine forests of Wisconsin are estimated to contain 41,000,000,000 feet of lumber, the largest proportion in the Chippewa and Wisconsin districts. They cover an area of 22,500,000 acres. The northern border of the pine area is less productive than the areas of lower latitudes. The cedar swamps of Wisconsin scattered through the pine belt are estimated to cover 1,365,000 acres, and to contain 62,800,000 posts, telegraph poles, and railroad ties. There are also large supplies of tamarack and spruce and valuable oak timber, especially in Dunn, Pierce, and St. Croix counties, and other hardwoods are abundant through the southern border of the wooded districts. The united area of the states south of Maryland and the Ohio river is more than 500,000,000 acres, containing nearly 400,000,000 acres of forest land.

PORTIÈRES of shella cloth are popular and well adapted for use in a room that is used a great deal. The material is so heavy that no lining is needed. It is alike on both sides.

Method of Obtaining Length of Rafters.

THE following table for obtaining the length of rafters is furnished by a correspondent in *Carpentry and Building*, which he claims is not only very simple, but mathematically correct. The word "pitch" means such a fractional part of the width of the building.

1-6	pitch	4 and 12	square	0.527046	rafter	1.054092	brace.
5-24	"	5 and 12	"	0.541666⅔	"	1.083333	"
1-4	"	6 and 12	"	0.559017	"	1.118034	"
7-24	"	7 and 12	"	0.578852	"	1.157704	"
1-3	"	8 and 12	"	0.600925	"	1.201850	"
3-8	"	9 and 12	"	0.625	"	1.25	"
5-12	"	10 and 12	"	0.6508541	"	1.3017082	"
11-24	"	11 and 12	"	0.6782843	"	1.3565686	"
1-2	"	12 and 12	"	0.7071068	"	1.4142136	"

The first column indicates the pitch of the roof; the second gives the figures on the square that will cut the various pitches; the third gives the length of a rafter for a building one foot wide, and the fourth gives the length of braces for runs of the same proportion as the figures in the second column.

The manner of using the table is as follows: For any given pitch multiply the tabular number by the whole width of the building, and the product will be the length of the rafter in feet and decimals of a foot.

Example.—What is the length of a rafter of a building 18 feet wide at ⅓ pitch?

Solution.—0.600925 by 18=10.81665 feet, or 10 feet 9 13-16 inches.

Example.—What is the length of a brace having 40 by 48 inch run?

Solution.—40 by 48 inches is the same proportion as 10 by 12; hence, 1.3017082 by 48=62.482 inches, or 62½ inches, always using the longest run for multiplier.

Example.—What is the length of a brace having 35 by 35 inch run?

Solution.—1.4142136 by 35=47.4974 inches, or 49½ inches.

Hardening Soft Limestones.

ATTEMPTS have been occasionally made to give certain limestones greater hardness by the use of alkaline silicates, saturating the limestones with a solution of these salts, upon which they quickly become covered with a more or less perfectly impervious glazing, but the difficulty of securing the right proportions, leaving soluble salts and water in the stone, resulting in the disintegration of the stone, has caused the practice to meet with disfavor. To obviate this disadvantage, M. L. Kessler proposes, in a paper recently presented to the Academy of Sciences of France, to use the fluor-silicates of magnesium, aluminium, zinc and lead instead of the alkalines, in which case only insoluble salts would be formed throughout the stone and a more homogeneous material would be obtained. If great hardness is not aimed at, but only a granular marble-like surface, it will be sufficient to make a paste of water and the powder of the limestone, to let this dry on the stone, and then apply the silicate. By mixing this with the silicates of iron, copper, chrominum, etc., the various colors of marbles may be imitated and the color would, as in the natural rock, be uniform through the whole stone. The materials are not more expensive than those of the old process.

Berlin's New Building Law.

ACCORDING to the London *Builder* there is greater activity in house-building in Berlin than has ever been known, an activity which has grown out of the rapid increase of population, 40,000 annually. Owing to abuses which have crept in, such as the diminution of court-yards, and increasing the number of buildings at the back as much as possible, the municipal authorities have coöperated with the chief of police in drawing up an amended code of regulations controlling all buildings and building operations in the German capital. The rules are, however, not to go into effect until next year. Among the new regulations is one providing that all basement dwelling-rooms must not be less than two-thirds above the level of the ground. Carpenters' and other workshops are henceforth to be limited to separate buildings. The new regulations will also require every floor above the second story to have two fire-proof flights of stairs (the present rule is that every dwelling must be accessible from one fire-proof staircase). Interior courtyards must have an area of at least sixty square metres, and the breadth must not be less than five metres, except in the case of corner houses. The maximum height will be 24 metres (about 70 feet), and no more than five floors are to be let out as dwellings in any one house. At present houses are being built over 27 metres high and with seven or eight stories.

THE Swart block, at Madison street bridge, is progressing rapidly, the work being above the street grade. On the river side heavy piling was necessary for a sated foundation. Upon this was placed dimension stone, but only to the level of the dockage where the brick commenced. The walls are two feet and the building will be of sufficient permanence, but for so important a structure too much wood has been introduced. Cappings of hardwood are used in place of stone over the basement windows on the river front, and in other places where iron or stone is the better material, wood is used.

A FLOATING elevator has been placed in the harbor at Bordeaux, France, to unload vessels arriving with cargoes of grain. It contains apparatus for weighing, cleaning and sacking the grain. From the ship's hold it can weigh, clean and weigh again, put into sacks and reload into trucks, 150 tons of grain per hour. The elevator is placed on a barge which is propelled by a screw worked by a compound surface-condensing steam-engine that furnishes the power for all these operations.

Architectural Notes.

GOSHEN, Ind., is enjoying a very lively building boom—nothing like it for several years. Two large manufacturing shops and several large, fine residences are among the results, besides many less pretentious buildings.

ARCHITECT J. M. VAN OSDEL is building a factory on Canal street, south of Harrison, for E. H. Shirk, of Peru, Indiana. It will be 88 by 150 feet, five stories and basement in height, and built of pressed brick and Bedford stone trimmings. Cost, $50,000.

THE new Board of Trade building is being pushed with remarkable activity, employing the labor of two hundred men. The walls are already up eighty-two feet, and will be carried up forty-four additional feet within six weeks, so as to be in readiness for the roof before the severe frosts set in.

ARCHITECT ION LEWIS has designed and under construction a fine house in Queen Anne style, for Samuel Bartlett, Esq., president of the Peoria board of trade. It is to be three stories high, finished throughout in hardwood, with windows of plate glass. The residence, with barn in the rear, will cost $40,000.

ARCHITECTS TREAT & FOLTZ are erecting for Dr. Joseph A. Hunt, at No. 21 Dearborn Place, a very handsome house of unique design. The front is broken by gables, and the bays novel and artistic; cost, $20,000. The same parties are building in Lake View, corner of Clark street and Deming Court, a three-story brick with stone trimmings, 28 by 68 feet, for R. A. Meiswinkel, at a cost of $8,000.

ARCHITECT BEMAN'S many large and important structures are well under way. The training school is progressing rapidly, the Washington park club-house is getting ready to roof, and sketches of the grand stand and stables have been submitted by him to the committee for approval. The mammoth foundations of the Pullman office building are laid and the walls of the first story well commenced.

MESSRS. O'BRIEN & BROS., painters and decorators, have the following work in hand: The painting and glazing of a block for the Greene estate, let by L. G. Quackenboss, architect; painting and decorating at H. B. Bryant's business college; painting a block for W. J. Quan, and the Exposition dining-room; and from Bauer & Hill, the architects, the contract for painting and decorating the Panorama building.

ARCHITECT RODATZ is building two marble-front houses for M. Clarkson at Indiana avenue and Forty-first street; also residence for M. Wm. Hudson; also rebuilding the First Presbyterian church of Englewood; a large residence for Col. Parker on Sixty-eighth street costing $65,00; a residence for J. Jones, $6,000, and a three-story store for Johnathan Clark, 25 by 75 feet, on Wabash avenue, near Sixteenth street.

ARCHITECTS BURLING & WHITEHOUSE have let the contracts for a four-story and basement warehouse for the National Tube Works. It is to be located on Clinton and Fulton streets, 148 by 150 feet. It will be built of brick, and cost about $65,000. It will be known as the National Warehouse, the lower floor and basement to be occupied by the tube works, and the remainder to be rented for general warehouse purposes.

THE mason contracting firm of McGraw & Downey has dissolved, and now the business is carried on by Mr. Joseph Downey. Mr. Downey has, through his successful carrying out of large contracts, become favorably known throughout the West, and has a well earned reputation, both as a skillful contractor and an honest one, as many commissioners of public works and railway companies can testify. The business will be carried on without interruption by the change.

THE High School building at St. Paul, referred to in our last number, the designing being credited to architect D. W. Millard, of St. Paul, was designed and the plans were drawn by architect George P. Randall, one of Chicago's veteran architects, and the construction was placed under Mr. Millard's supervision by the board, who employed him for that purpose. Mr. Millard is a former pupil of architect Randall, and an estimable gentleman, and we make the correction in justice to both architects.

THE new west-side theatre located corner of Halsted and Jackson streets, being built for Messrs. Townsend, Wilcox & Harvey by architect Oscar Cobb, under the superintendence of Mr. Cook, the contractor, is well under way and will be finished by Christmas. It will possess many attractive architectural features, and as the decoration will probably be in the hands of a notable Chicago fresco artist and the scenic work by the well-known artist Frank B. Skiff this new theatre will be an ornament to the west side.

MR. T. H. TRAVER has designed and built for Mr. William Dickinson, at a cost of $60,000, two elegant flat buildings on Division street, near the lake shore drive. They are called the Irving and the Bellville, are three stories and basement in height, pressed brick, and have a frontage of 120 feet by 80 deep. Stained glass and other ornamentation, including tiling, is largely used, and this, with the exceptionally well planned apartments, makes these flats handsome and elegant in the extreme. The buildings are ready for occupancy.

THE foundations for the open board building are commenced, and the architects, Wheelock & Clay, say the work will be pushed rapidly with the expectation of having it under roof before "snow flies." The general plan of the building is smaller to that of the C. B. & Q. offices, a large court in the center giving light to the offices from the interior as well as from outside. The skylight over this court is 60 by 50. The hall of the board on the first floor is 30 feet high, covering the whole area of the building except one side, in which there is an entresol floor. The design is simple and massive, and will cost when completed about $135,000.

ARCHITECT F. L. CHARNLEY has let the contracts to Messrs. Parmley & Rawlins, for a building to be built on Market street, just north of Van Buren. The building is to be seven stories and a basement, with a large vault under basement sidewalk. There will be two driveways from Market street, so wagons can drive in. The river front will have eight feet dockage. The building will be a heavy and substantial one, and will be erected in the best manner. The front will be of Anderson pressed brick. The dimensions of the building will be 94 by 100 feet, and will cost $55,000, and has been leased to Dike & Minkler for warehouse purposes. He has also let contracts for a building for James J. Gore, corner State and Forty-seventh streets.

MR. J. H. FURBER is superintending the plans in Mr. Boyington's office for the new conservatories to be erected at Rose Hill cemetery. The buildings will cover 230 by 80 feet. In the center will be an ordinary pavilion thirty feet square carried up forty-four feet, with ornamental terminals. At each end will be harmonious pavilions reaching an altitude of thirty-three feet. Between these will be a system of low growing-houses. The group will be built almost entirely of glass, on a brick base three feet high. The pavilions will be supplied largely with cathedral glass in ornamental shapes and artistic positions. The expense will be $25,000.

ARCHITECT W. W. BOYINGTON is building a handsome residence for W. S. Lacher, at Highland Park. It is Eastlake in style, the first story is of pressed brick with wood above. The first floor is arranged with large reception-room and parlor, with sitting-room and dining-room off, and library back. On the second floor are six sleeping-rooms. A high pitch roof and wide veranda around front and side ornament the structure. The villa will cost about $12,000. This architect has forwarded plans for a three-story bank building at Helena, Montana. It is to be built with a basement of rough ashley work and pressed brick above. The first floor will contain the banking-rooms, etc., and the rest of the building will be used for offices. The cost will be about $35,000.

ARCHITECT W. W. BOYINGTON has planned and designed a new palatial residence for ex-Alderman Chase, to be erected on the west side of Ashland avenue, between Adams and Monroe streets. It will be in the modern Gothic style, three stories and basement, 48 by 68 feet. The elevation will be ornately designed with a projecting tower rising fifty-six feet above grade, at the northeast corner. The main entrance will be ornamented with polished granite columns, and will have a bay twelve feet in width. The windows will be plate glass, with arched heads and stained glass transoms. To the left of the entrance central hall, ten feet wide, will be a reception-room 16 by 33 feet; back of the reception-room will be a library-room with circular bay light, and a sewing-room. Beyond these will be a dining-room 15 by 33 feet, to the right of which will be a complete system of culinary rooms. An elaborately carved staircase will ascend at a right angle with the entrance hall, in the rear of the parlor. The second floor will be devoted to sleeping-rooms, servants' rooms, linen-rooms, lavatory, etc. At the rear of the building will be erected a fine two-story brick barn and carriage house. Total cost, $42,000.

THE new passenger station of the New York, Chicago & St. Louis (Nickel Plate) road, at Cleveland, just completed, is a pleasant departure from the old stereotyped depot of the past. It is what may be called "Americanized" Modern Gothic in design, built of pressed brick with Ohio sandstone trimmings, slate roof, etc. In plan it consists of a central or main building two stories high (containing waiting-rooms, ticket and other offices), and two wings (one for dining and lunch rooms, the other for baggage, express and telegraph offices) connected with main building by low, inclosed passage-ways. The trains are well sheltered by a wrought and cast iron open shed track-house, having four covered connections with main buildings. The entire structure is about 310 feet long, with an average width of 45 feet. The work has been well and thoroughly done, under the general supervision of Mr. J. A. Latcha, chief engineer, ably assisted by Mr. Louis Cowles, architect, and Mr. Charles E. Cole, superintendent of construction. The general contractors for the entire work were Messrs. Dantel & Meinicke. The stone and wood carving was done by Mr. William Crosbie, and the woodwork by Lattimer & Moore, to both of whom special credit is due for the beautiful effects and finish produced.

ARCHITECT L. G. QUACKENBOSS has just completed two modern residences, Nos. 3144 and 3146 Wabash avenue, for Mr. A. McIntosh. They are each four stories high, 25 by 75 feet, containing sixteen rooms and fourteen closets. The first floors comprise a vestibule, reception hall, grand staircase, rear hall, front and back parlors, dining-room, kitchen, butler's pantry, storerooms, etc. The fronts are of pressed brick with stone approaches. The interiors are finished in oak, walnut and cherry. Cost, with two barns at the rear, $28,000. The same is also erecting on Ashland avenue, near Harrison street, a costly residence with stable, for Mr. P. L. Autin. The cellar will be faced with artesian blockstone, and the first and second stories with rock-faced bush-hammered greenstone. The interior will be finished in black-walnut throughout. The roof will be slated mansard. Also has let contracts for building of six flats for Messrs. Kinney & Kimball, as agents for the executors of the Harley Green estate, on Thirth-seventh court and Wabash avenue. It will be of pressed brick and stone fronts, having-projecting bay-windows. Also is finishing two buildings on West Congress, near Loomis street, arranged as private residences, for L. A. Lango and C. Lichtenberger. They will have pressed brick fronts with stone base and trimmings. Also a three-story building, 25 by 70 feet, at 302 West Van Buren street for H. M. Barbour, arranged as a store with dwelling over. The front is of pressed brick with galvanized iron bay-windows and whitestone dressings; cost, $12,500. Also just completed a costly barn at 2442 Michigan avenue for O. H. Roche, Esq., 46 by 40 feet. The front is of Anderson pressed brick with blockstone base and brownstone dressings — slate mansard roof. Also has completed drawings for several cottages, near Forty-third street, for W. B. and G. D. Holton, to cost about $6,000, and is preparing the plans for a first-class residence at Garfield Park for J. Oliver, Esq.

Lumber Notes.

MAPLE lumber is being shipped east from Emmett county, Mich.

THE mills on Gray's harbor and Chehalis river, Wyoming territory, ship 1,000,000 feet of lumber per month.

THE Pearce Lumber Company, of New Jersey, last week purchased of the St. Louis & Iron Mountain Railroad Company 5,000 acres of finely timbered land, situated in Saline county, Arkansas.

THE *Wausau Review* says: The last log for mills below passed Wausau boom last Monday. In the neighborhood of 20,000,000 have been passed through for mills at Stevens Point and Port Edwards.

THE daily cut of the mills on Columbia river, Oregon, is 650,000 feet. About $1,000 worth of logs are daily floated out of John Day's river. The mills of Astoria and vicinity daily cut $150,000 worth of lumber.

THERE had at a late date been rafted in the Penobscot, Maine, 54,000,000 feet of logs, and 45,000,000 were in the booms. From the east branch 6,000,000 feet were yet to come, and 40,000,000 from the west branch.

THE cyclone in the vicinity of Hubbard lake, some time since, blew down 30,000,000 feet of timber, nearly all Norway, which will have to be lumbered next winter; 10,000,000 feet of this timber belonged to Fletcher, Pack & Co., of Alpena.

THE Wausau *Central* says: The Wisconsin is now at a fairly good driving stage below here, and this week Bosworth & Riley and the Woodenware company, both of Stevens Point, have started about 20,000,000 feet of logs for their place, with about forty men on the drive.

THE sawing capacity of the Oscoda Salt and Lumber Company's mill recently burned was 5,000,000 feet per month, and estimating the season as four months from the first of August, the aggregate manufacture of Oscoda for the year of 1883 is by this casualty lessened 20,000,000 feet.

THERE are needed for every mile of railroad 2,600 ties. Estimating the aggregate of railroad track in the United States at 110,000 miles, there are in use 286,000,000 ties. When we reflect that the average life of a tie is but from three to four years, it will be seen how great is the consumption of timber for this use alone.

PORT ARTHUR, ONTARIO, has suddenly become of considerable importance as a lumber market. Shipments have been large and active. It is mentioned that at that point one of 6,000,000 feet is being cut for a Winnipeg firm, to be used in building elevators in the Northwest. It is estimated that over 25,000,000 feet will be transhipped at Port Arthur this season.

THE Menominee *Herald* says: The mills on both sides of the Menominee river are sawing about 12,000,000 feet of lumber every six days; of this amount the Menominee mills cut about 6,250,000. The number of logs scaled up to May 31, this year, was 353,070; the amount of lumber cut to that date was 61,748,235 feet, and the logs averaged 175 feet each. At least 400,000,000 feet of lumber will be sawed this season. Ninety per cent of this lumber finds its way to the Chicago market.

MILLMEN generally will be interested in a new sandpapering machine which is one of the recent designs of the Cordesman & Egan Co., Cincinnati, Ohio, who manufacture it in different sizes, from 24 to 40 inches wide. They inform us that they are especially suitable for polishing doors, which can be passed through whole, and sandpapered in the smoothest manner. The machine is of massive proportions, and fitted with eight feed rolls, geared in train, and it being constructed especially with a view to convenience in operating, the drums being made of iron, turned perfectly true, the sandpaper has to be renewed but about half the number of times usually necessary, thus effecting a large saving of time and trouble.

THE Bay City *Lumberman's Gazette* states: The mills at Alpena have, as a rule, sold close up to the cut, and many have made large sales of lumber to be cut, the George Prentiss Lumber Co. having sold 5,900,000 feet ahead, Fletcher, Pack & Co. some 2,000,000 feet ahead, and others of the mills in like proportion. The entire cut for the season of W. H. & E. K. Potter's mill has been sold, and is being shipped as fast as cut; 5,000,000 feet having already been cut and shipped. The aggregate of timber available for this year's operations is:

	Feet.
New logs from all sources	184,000,000
Old logs left over	38,000 000
Total	222,000,000
To be carried over, estimated	70,000,000
Cut for 1883	152,000,000
Lumber carried over	40,000,000
Marketed and to be marketed	112,000,000

In the item "logs and lumber carried over," we refer to that which is to be carried over to the next season, and when the cut of W. H. & E. K. Potter, already marketed, and other sales and shipments already effected, are taken out, it will be seen that there is certainly no startling prospective lumber product to be thrown upon the market at Alpena.

Mosaics.

LAREDO, Texas, has awarded the contract for the erection of a $37,250 city hall and market-house. The city council has ordered the issuance of $75,000 bonds for this and other improvements, including a $10,000 schoolhouse and city hospital.

A PENNSYLVANIA firm is now erecting at Johnson city, Tenn., what is said to be the largest tannery in the world. The building will cover several acres, and the vats will be on an extensive scale. The supply of oak bark is said to be almost inexhaustible in that portion of Tennessee.

Personal Gossip.

HENRY I. COBB, of the firm of Cobb & Frost, has torn himself away for a few days. Much needed rest.

ARCHITECT FRANCIS M. WHITEHOUSE, of the firm of Burlington & Whitehouse, is vacating in the East. Report says he is fox-hunting.

CONTRACTOR ROGERS, of the firm of Rogers & Koch, who was reported injured a few weeks ago, is still on deck, and does not remember any serious accident of recent date. It was evidently another man.

ARCHITECT B. J. BARTLETT, of Des Moines, Iowa, has been in the city for two weeks, looking after the work commenced on the Lake Presbyterian church and Dr. Scott's residence, which he is building, and purchasing material for a number of churches.

ARCHITECT CHARLES B. COOK, of Winona, Minnesota, a representative of the young enterprising architects who are building the structures that will make the new Northwest beautiful in architectural design, was in the city last week. It is pleasant to meet these gentlemen, for their views are always entertaining.

ILLUSTRATIVE of the national reputation enjoyed by many Chicago architects, Mr. H. J. Kimball, proprietor of the Kimball House, at Atlanta, Georgia, lately burned, has come to Chicago for plans. On the recommendation of several prominent hotel men, architect W. W. Boyington was entrusted with the work of preparing designs. They will be prepared before Mr. Kimball's next visit, about the 25th inst.

THE office of Architect John M. Van Osdel has been refurnished and is neat and tasteful as can be, besides occupying more room. This veteran architect has occupied almost the same ground for upwards of fifty years, and seen the city grow and spread, aiding much in the building and the rebuilding. This newer office and younger hands at the drafting boards are too suggestive of the changes of time, but still indicative of well-earned rest after fifty years in service. May the veteran long remain with us to watch the growth of a city of which he may well be said to have laid the foundations.

Synopsis of Building News.

Attica, Ind.—The building situation and outlook has been and is better than in any previous year since 1861. A Building Association has had much to do with this prosperity. There is a strong probability that the shops of the C. G. and S. R. Y. railway will be located here.

Architect Geo. P. Pearson: John Sheridan, 20 by 80 feet; Jones, Durgin & Co., 23 by 65 feet; Zeigler & Sons, 25 by 80 feet; Peacock & Martin, 25 by 80 feet; S. Bernhart, 25 by 80 feet; F. Rohlfing, 30 by 65 feet; Bell, Millard, Little & Green, 40 by 80 feet, making eight business rooms in one block, two stories high, of brick with iron front, galvanized cornices and tin roof, aggregate cost $25,000; Sims & Fidels and G. P. Pearson, contractors. Z. Blunt, two-story brick 21 by 48 feet, tin roof, cost $2,500; Sims & Fidels contractors. J. B. Gunin, story and half frame dwelling, cost $2,500; L. Shepherd, contractor. C. H. Todd, two-story frame, tin roof, cost $2,500. All of the above are under way. Several other (eight) smaller houses are under way ranging in cost from $500 to $1,500. There are projected a two-story brick, 41 by 70 feet for the city, which will include fire department, mayor's office, hall and calaboose, to cost $5,500, and a frame depot building for the C. & G. S. railway to cost $2,500.

Cleveland, Ohio.—Present condition and outlook satisfactory.

Architects Clarence & Co.: Bradford & Carter, four-story brick block, 66 by 120 feet, cost $35,000; Thomas Lucas, contractor. E. J. Foster, three-story brick block, 100 by 100 feet, cost $25,000; Jno. Scott, contractor. H. C. Wick, two-story double dwelling, stone, 60 by 75 feet, cost $16,000; Harris & Grant, contractors. L. Lascelle, two double frame dwellings, cost $6,000; A. F. Myers, contractor. (The above just finishing). Coe Ridge schoolhouse, two-story brick, cost $4,000. Geo. Presley, frame dwelling, cost $7,000; A. Hartzell, contractor. Mrs. M. Thornton, frame dwelling, cost $7,000; A. S. Morgan, contractor. C. V. LaVayea, frame dwelling, cost $5,000; A. G. Marble, contractor. H. C. Ford, frame dwelling, cost $3,000; Toote, contractor. Theo. W. Sterling, six small houses, cost $5,000. The above are all under way. Mrs. Wyman and N. S. Mullen have each frame dwellings out for figures.

Cincinnati, Ohio.— Architects and builders all busy and the prospects good. There will be a fine architectural display at the exposition.

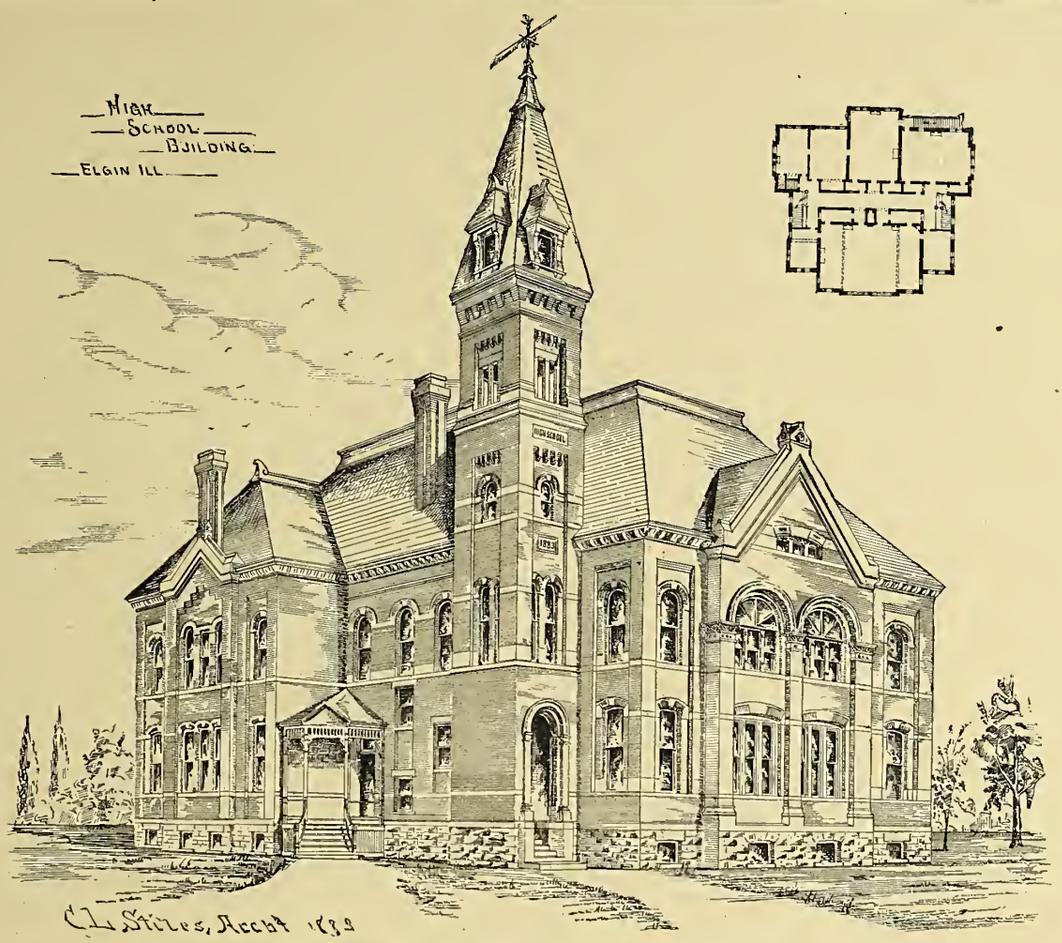
Architect Geo. W. Rapp: Mrs. M. Darnsmont, three-story brick building on Vine street, tin roof and remodeling, cost $15,100; Harig & Brugeman, contractors. Peter Scherr, three-story brick building, 50 by 80 feet, for stores and flats, corner of Liberty street and Central avenue, cost $25,000; W. Miller, contractor. Chas. Wittslein, two-and-half story frame residence, tin roof, on Kemper Lane Walnut Hills, cost $6,298; Griffith & Sons, contractors. Dr. Schneider, alterations on brick building, corner of Ninth and Vine streets, cost $9,500. All the above under way. Alf. Schinill, two-and-half story frame residence, slate roof, to cost $10,000, projected.

Architect E. Anderson: M. White, two six-story stores, 48 by 90 feet, pressed brick fronts. A. Street, large frame residence. Union Distilling Co., tower and rectifying houses. J. W. Coyer, Peoria, Ill., frame residence. Farmers National Bank, Ripley, Ohio, brick with stone and iron front, 18 by 60 feet, Jas. Gilliland & Co., owners. Munk & Roberts, Connersville, Ind., furniture factory, 50 by 225 feet. G. Jelenko, Charleston, West Va., large brick dwelling. T. H. Heck, Augusta, Ky., brick residence. Miss A. E. Dick, Price's Hill, Ohio, double frame cottage, Geo. Christ, Ivanhoe, Ohio, four frame cottages. Frank W. Handy, Avondale, Ohio, Kindergarten building. Office building for Covington and Cincinnati Bridge Company, brick. All the above under way. W. Zinn, Delhi, Ohio, one brick and two frame dwellings, and Jas. Dalton, Avondale, Ohio, large double frame dwelling—projected.

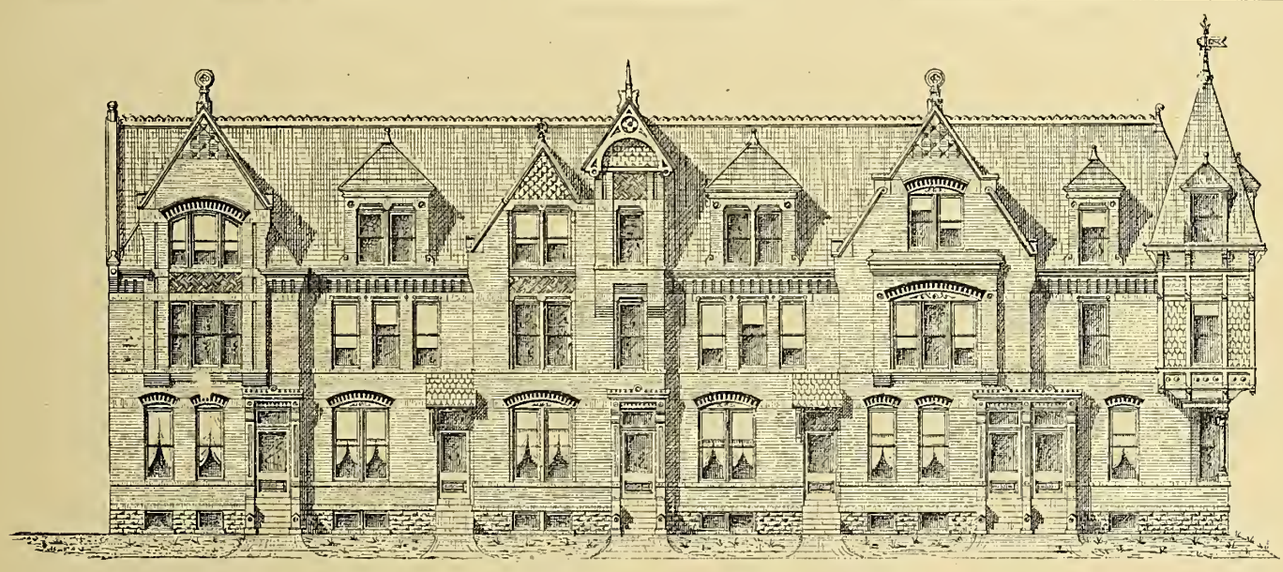
Chicago, Ill.—There is activity all along the building line. The ring of the trowel may be heard in every district of the city. The fair prices for material have induced many to commence building so as to have them completed by May 1, 1884, hence the outlook for autumn work is excellent.

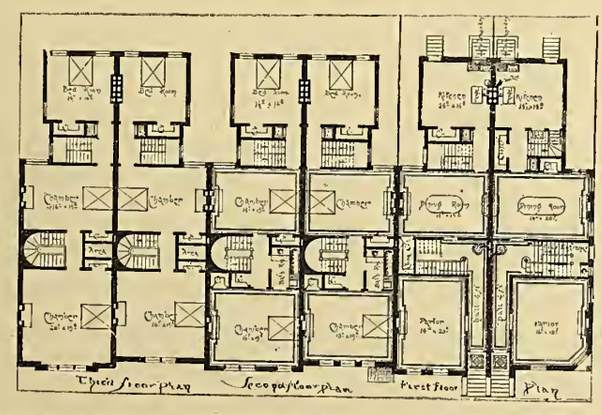
Architect H. Rhewoldt: Jas. Roster, three-story brick, 27 by 72 feet, cost $11,000; A. A. Stevens & Co., contractors. H. Fleutge, two-story brick, 35 by 52 feet, cost $7,000. Mrs. E. Lardner, two-story brick, 22 by 50 feet, cost $6,000. John Liversy, two-story cottage, 27 by 60 feet, cost $6,000; W. Pollock, contractor. M. Schmitz, three-story brick, 22 by 52 feet, cost $5,000; his own contractor. Wartelsky & Son, two-story brick, 24 by 70 feet, cost $5,000; W. Goldie, contractor. Rebecca Quimby, two-story frame, 18 by 32 feet, cost $9,000; C. R. Nicely, contractor. W. Griffith, three-story brick, 22 by 65 feet, cost $7,500, his own contractor. S. Kohn, three-story brick, 24 by 60 feet, cost $7,500; W. Goldie, contractor. P. Schmidt, two-story brick, 24 by 65 feet, cost $5,500; same contractor. L. Kneidl, three-story brick, cost $2,500; M. Schmitz, contractor. Chicago Varnish Company, two-story brick, 60 by 100 feet, cost $10,000; F. Hamsen, contractor. F. Kollman, three-story brick, 24 by 67 feet, cost $12,000; A. A. Stevens & Co., contractors. D. Russ, two-story frame, 22 by 50 feet, cost $3,000; own contractor. Mrs. E. Klaner, two-story brick, cost $11,000; Val. Lund, contractor. All the above are under construction. P. Hibbard, two-story frame, 26 by 48 feet, to cost $3,500. E. Grecnburg, three-story brick, to cost $5,500, and H. Welge, three-story brick, to cost $11,000, are projected.

Architect J. Otter: C. P. Hólmberg, three-story and basement building 25 by 75 feet; Philadelphia pressed brick and stone front, cost $12,000. J. A. Blomgren, three-story and basement, brick, 50 by 75 feet, cost $18,000. R. Blomgren, three-story and basement, brick, 25 by 75 feet, cost $9,000. J. A. Lend, three-story, Indiana pressed brick front, 50 by 100 feet, cost $22,000. A. P. Shogan, two-story, brick, 47 by 100 feet, cost $9,000. A. Morgan, three-story, brick, 30 by 40 feet, cost $5,000. J. Junch, three-story,



SCHOOLHOUSE AT ELGIN, ILL.—C. L. Stiles, Architect.





RESIDENCE BLOCK, CINCINNATI, O.—G. W. RAPP, Architect.

brick, 22 by 65 feet, cost $5,000. Mrs. B. Siegler, three-story, brick, 22 by 55 feet, cost $5,000. C. Carlson, two-story and basement, brick, 25 by 45 feet, cost $5,000. J. Nygren, two-story and cellar, brick, cost $3,500. T. McNulty, two-story and basement, brick, 22 by 46 feet, cost $6,000. A. Ness, two-story and basement, brick, cost $6,000. James Kennelly, three-story and cellar, brick, 23 by 54 feet, cost $5,000. O. J. Nelson, six story and cellar, 70 by 100 feet, brick, cost $25,000. F. Bush, three-story and basement, 22 by 80 feet, cost $9,000. A. Munson, three-story and basement, brick, 28 by 73 feet, cost $8,000. A. Almert, three-story and cellar, brick, 42 by 52 feet, cost $8,000. All under way except last four, which are projected.

Architect J. W. Ackerman: D. J. Simpson, two-story brick dwelling, 24 by 38 feet, slate mansard roof, and barn, 20 by 24 feet, cost $5,500; J. McKinlay, contractor. Sam'l Simons, four buildings, two stories and cellar, 68 by 52 feet, cost $9,000. H. W. Chase, two residences, stone fronts of Pennsylvania green stone, valce Bedford stone, 22 by 56 feet, cost $1,000; J. C. Anderson, contractor. P. O'Callahan, two-story and cellar building, 27 by 62 feet, with slate mansard roof, cost $6,500; G. E. Verlin, contractor. Thos. Scanlan, two-story and cellar building, 22 by 56 feet, cost $5,000; J. McKinlay, contractor. —— Sweeney, remodeling store building with two flats, cost $3,500; J. M. Dumpley, contractor. (All in course of construction.) J. O'Callahan, three story store building with basement, 25 by 60 feet, cost $7,500 (projected).

Architect Geo. S. Spohr: A. Leibec, six two-story and basement dwellings, pressed brick fronts with stone trimmings, each 20 by 36 feet, cost $20,000; Frederick & Clark, contractors. E. Harland, four four-story stone front houses, 65 by 45 feet, cost $18,000. G. C. Koch, two-story basement and attic residence, pressed brick front, 35 by 70 feet, cost $15,000. Mrs. C. Anderson, two-story and basement brick dwelling, 22 by 60 feet, cost $5,000. Daniel O'Brien, three-story and basement building, 30 by 70 feet, cost $10,000. J. Thong, two three-story and basement buildings, 50 by 70 feet, cost $10,000. H. E. Keeler, three-story and basement building, 25 by 60 feet, cost $5,000. Dr. Case, two three-story buildings, 50 by 60 feet, cost $7,000.

Architect J. C. Cochrane: James H. Thompson, three-story and cellar residence, brick with stone trimmings, 24 by 64 feet, cost $15,000 (by days work). O'Neil Bros., four-story and cellar warehouse, 48 by 130 feet, cost $25,000; E. Y. Goebel, contractor (foundations of above being laid). Thos. Wilmarth, Ravenswood, two-story and attic, frame on brick foundations, irregular in shape, cost $5,000 (about completed). E. Y. Moore, same place, similar residence, cost $8,000 (contract not let). Cook County Hospital, additions, 90 by 116 feet, and two pavilions 50 by 90 feet each, all five stories, costing respectively $150,000 and $125,000 (the former about completed, the latter under roof); Geo. Messersmith, contractor. First Baptist church, Sepea, Ill., frame structure on stone foundation, in Queen Anne style, 48 by 170 feet (foundation in); J. H. Mason, contractor. Court-house, Marshall, Mo., brick with stone trimmings, 90 by 110 feet, cost $60,000 (roof on); Volt & Co., of Rock Island, contractors. Court-house, Valparaiso, Ind., stone exterior, 88 by 118 feet, cost $126,000 (foundations being laid); J. D. Wilson, Valparaiso, contractor. Almshouse, Crown Point, Ind., brick structure, 40 by 176 feet, cost $16,000 (not let). Central Baptist church (city), brick with cellar, 75 by 100 feet, cost $25,000 (contract not let). Warren & Co., Crown Point, Ind., two-story brick store, 27 by 90 feet (under roof); George Lee, Crown Point, contractor. Amos Adams, same place, two-story, brick veneered residence, 30 by 51 feet, cost $7,000 (about completed); same contractor.

Architect Julius Huber: E. Huber, three-story store, pressed brick front, flat roof, 24 by 58 feet, cost $7,400; Roessler & Winckler, contractors. Mall Bros., two-story frame store and dwelling, 30 by 70 feet, cost $5,600; L. Huzog, contractor. School Board, Ravenswood, two-story frame schoolhouse, 26 by 48 feet, cost $25,000; R. W. Gronow, contractor. J. L. Hathaway, coalshed, 350 by 250 feet, cost $20,000; C. Taylor, contractor. Cross Creek Coal Co., shed, 150 by 500 feet, cost $30,000; A. Day, contractor. Mrs. E. Weigle, two-story market building, pressed brick front, 50 by 160 feet, cost $15,000; King & Demuth, contractors. The above are all in course of construction. C. W. White, block of eleven dwellings, two-story and basement, pressed brick front and cut stone, 60 by 200 feet, cost $60,000. J. Becker, two-story, pressed brick building, 22 by 60 feet, cost $8,000. J. Mosenbacher & Bro., two three-story flats, pressed brick fronts, 24 by 60 feet each, cost $14,000. C. Weber, frame cottage, 30 by 55 feet, cost $3,000. J. L. Hathaway, coalshed, 140 by 200 feet, cost $6,000. J. Campbell, frame cottage, 22 by 45 feet, cost $2,000, are projected.

Architect F. Kettenich: N. Ernst, three flats, Ashler fronts, with French roofs in front, 22 by 50 feet, cost $5,545; A. Harnowsky and T. Neff, contractors. B. Bierfeld, two-story and basement, 24½ by 75 feet, cost $4,500; A. Halfinch, contractor. T. Larr, six two-story and basement flats, 22 by 62 feet, cost $4,430; C. Hupfer and W. Witt, contractors. Mrs. H. Lewis, store and three flats with basement, 24 by 60 feet, cost $3,750; E. Holmes, contractor. Pats Gern, six three-story and basement flats, 22 by 60 feet, cost $4,150; same contractor. Frank Coosnicka, four two-story and basement buildings, 21 by 30, 22 by 72, 21 by 64 and 21 by 62 feet, cost, respectively, $5,675, $5,150, $4,800, $4,725; his own contractor. J. Tetmeider, one-story and basement building, 22 by 45 feet, cost $2,225. Projected by G. Wimner, three story and basement flats, 22 by 66 feet, cost $9,000. L. Lumpp, two-story basement and attic building, 22½ by 85 feet, cost $5,850. J. Kucin, two-story basement and attic building, 24 by 84 feet, cost $6,550. B. Heinlein, two-story basement and attic building, 22 by 34 feet, cost $2,750. F. Leitel, similar structure, 22 by 45 feet, cost $3,200. P. Kennedy, one-story frame, 24 by 50 feet, cost $3,220. W. Gilman, two two-story double houses, 40 by 45 feet, cost $3,000. B. Barges, two-story store, 25 by 75 feet, cost $4,650.

Architect H. Kley: F. Woelke, three-story and basement brick, 28 by 110 feet, cost $14,000 (completed); Maier & Teckel, contractors. H. Wedekind, two-story and basement brick, 24 by 65 feet, cost $5,000; E. Menshing, contractor. B. C. Legor, same, without basement, 25 by 60 feet, cost $4,300; H. Tuehr, contractor. A. Burke, same, 22 by 46 feet, cost $3,000; Rathyen & Co., contractors. H. Knipp, same, and basement, 25 by 68 feet, cost $5,000; H. Kirchoff, contractor. C. Tokup, four-story and basement, 83 by 112 feet, cost $12,000; P. Ott, contractor. L. Ohlendorf, four-story and basement, 52 by 76 feet, cost $17,000, H. Luehr, contractor. L. Benson, three-story and basement, 25 by 78 feet, cost $9,300; C. Back, contractor. M. W. Ford, three-story, minus basement, 45 by 80 feet, cost $5,300; Maier & Tekel, contractors. F. Bartuska, three-story and basement, 26 by 120 feet, cost $13,300; C. Betzel, contractor. Wolff & Tchiessel, three-story and basement, 50 by 70 feet, cost $11,500; Menke & Co., contractors. G. Eggers, two-story building, 25 by 65 feet, cost $4,300. F. Korthes, three-story and basement, 25 by 80 feet, cost $9,500.

Architect S. P. Lane: M. Treistein, frame store, 69 by 116 feet, cost $3,500. M. Cole, brick flat, 25 by 36 feet, cost $2,000; Russell & O'Connell, contractors. M. Watkins, four two-story cottages, 25 by 42 feet; Meyer & Bros., contractors. M. Phelps, two-story residence, 32 by 46 feet, cost $3,000. Mrs Wood, two-story frame, 25 by 46 feet, cost $2,200; J. Reuth, contractor. Church at Lake View, pressed brick, 80 by 50 feet, cost $6,000. M. Schneider, frame cottage, 25 by 43 feet, cost $2,000; MacKerlie & O'Toole, contractors. M. Dunlap, frame residence, 30 by 45 feet, cost $3,300; M. Ellis, contractor. Mr. Hartung, frame store, 60 by 100 feet, cost $5,500. Mr. Wheeler, frame residence, 30 by 50 feet, cost $3,100. Mr. Rinder, frame dwelling, 25 by 50 feet, cost $2,000. All the above under way except the church and Mr. Phelps' building, which have not yet been commenced

Architect Hallberg is building a residence for Swain Nelson on Belden avenue. It is of Anderson pressed brick with stone basement. It will be three-story and basement, to cost $40,000. Also a block of three houses for Kussel Bros. Anderson pressed brick front and side walls on Menominee street, two stories, attic and basement, 72 by 64 feet, cost $15,000. Also residence for Mrs. Matilda Hale on Jackson street near Ashland avenue, brown stone front, three stories and basement. The front is handsomely designed, it will be 83 by 24 feet, to cost $12,000.

Detroit, Mich.—The building status is good in this city and vicinity, and the outlook flattering.

Architects, Julius Hess & Co.: Kalkaska county courthouse, cost $20,000; Dawson & Anderson, contractors. Sanilac county jail and sheriff's residence, cost $12,000; Crarey & Krantz, contractors. Parke, Davis & Co., laboratory, cost $15,000; Tapping & Fisher, contractors. Perrien Bros., alteration to flouring mill, cost $5,000, by the day. Peter Fox, two residences, brick, cost $14,000 and $7,400; R. Helson and Spitzley Bros., contractors. John Blessed, residence, brick, cost $5,300; W. J. Vinton, contractor. Evans estate, residence, brick, cost $7,000; Spitzley Bros., contractors. W. S. Crane, residence, brick, cost $8,250; Allen Holmes, contractor. E. W. Voigt, brewery, cost $50,000; P. Dee, contractor. Same, stable, cost $5,300; C. Stange, contractor. J. G. Dickinson, residence, brick, cost $8,100; A. Holmes, contractor. W. C. Bramwell, residence, frame, cost $3,700; H. George, contractor. Geo. Stark, residence, brick, cost $4,100; Spitzley Bros., contractors. St. Paul's church, new spire, cost $5,300, same contractors. F. Knebler, Sandusky, O., refrigerator, cost $4,700; T. P. Tuite & Co., contractors. F. Horix, Akron, O., same, cost $4,900, same contractors. All of the above under way or contracts let.

Architects, Mason & Rice: Julius Strelinger, three-story brick residence, 50 by 70 feet, cost $9,000, by day-work. H. H. Taylor, two-story frame residence, 40 by 60 feet, cost $6,000; H. George & Son, contractors. Methodist chapel, brick, 45 by 90 feet, cost $10,000; Dewey & Able, contractors. Frank B. Preston, frame residence, 40 by 60 feet, cost $8,000; Spitzley Bros., contractors. Geo. L. Hommediew, residence, brick, 45 by 60 feet, cost $15,000; Nuppenaw & Clark, contractors. D. Carter, residence, brick, 50 by 80 feet, cost $13,000; Gearing & Co., contractors. H. C. Parke, additions, brick, 40 by 50 feet, cost $15,000; Teakle & Co., contractors. Mrs. D. Thompson, Home for Old Ladies, 60 by 100 feet, cost $30,000; Gearing & Co., contractors. D. E. Rice, double residence, brick, 40 by 65 feet, cost $5,600; W. Claxton, contractor. Union Yeast Co., brick store, 42 by 60 feet, cost $7,000; M. Blay, contractor. Geo. L. Hitchcock, Farwell, Mich., frame residence, 45 by 75 feet, cost $7,000; W. Claxton, contractor. Amherstburg, Ontario, town hall, brick, 50 by 90 feet, cost $12,000; W. Fairburn, contractor. Ludington, Mich., town hall, brick, 50 by 80 feet, cost $14,000. L. St. Aubin, frame residence, 30 by 50 feet, cost $3,000; J. Brand, contractor. G. V. Northrup, block of stores, brick, 80 by 100 feet, cost $15,000; H. George & Son, contractors. J. H. Haskall, frame, residence, 30 by 50 feet, cost $3,000; J. Brand, contractor. M. McNamara, varnish factory, brick, 35 by 60 feet, cost $7,000; Spitzley Bros., contractors. W. B. Morley, Marine City, frame residence, 50 by 70 feet, cost $8,000. W. H. Jewell, residence, brick, 35 by 65 feet, cost $5,000; George & Son, contractors. D. W. Fales, residence, brick, 40 by 70 feet, cost $8,000. S. Pratt, boiler shop, brick, 150 by 180 feet, cost $10,000; Spitzley Bros., contractors.

Fort Wayne, Ind.—Architects and builders fairly busy and outlook for balance of the season satisfactory.

Architects J. F. Wing & Co.: Jas. M. Barrett, two-story brick residence, slate roof, 60 by 80 feet, cost $10,000; under several contractors. O. S. Hanna, same character of residence, 35 by 57 feet, cost $5,000; Fred Boister, contractor. Nirdlinger estate, opera-house, brick walls, slate roof, 35 by 57 feet, cost $20,000 (projected). Mary C. Sturgis, two-story double tenement house, brick and slate roof, 58 by 48 feet, cost $7,000; Charles French, contractor. German Reformed church, orphan asylum building, two-story brick with slate roof, 40 by 76 feet, cost $10,000 (projected). School building, Angola, Ind., two-stories, brick with slate roof, 67 by 86 feet, cost $15,000; Wm. Myers, contractor. Two district schoolhouses, Aboit township, two stories and basement, brick with slate roof, 28 by 35 feet, cost $2,500 each; H. W. Clark, contractor. Addition to Judge Lowry's residence, brick with tin roof, 16 by 24 feet, cost $1,000; A. Grotholman, contractor. First Presbyterian church, Bluffton, Ind., brick with stone trimmings, transepts Sabbath-school rooms, 65 by 90 feet, cost $9,000; H. W. Clark, contractor. Bliss hotel, same place, three-story brick, 58 by 88 feet, cost $10,000 (by day's work). Moorman, Lewis & Diggs, Winchester, Ind., three three-story brick buildings. Masonic Hall in third story, 76 by 100 feet, cost $20,000; Campfield & Gridley, contractors.

Frankfort, Ind.—The building outlook is good; present business active.

Architect J. W. Hammond: Samuel Castner, one-story frame cottage, 30 by 46 feet, cost $1,800; A. A. Bayless, contractor (near completion). Geo. Malain, one-story frame cottage, cost $1,000 (under way). T. Marshman, Jefferson, Ind., two-story dwelling, cost $2,000 (projected). S. Boots, Montgomery Co., two-story dwelling, cost $1,800 (under way). Wm. Freeze, Frankfort, Ind., two-story dwelling, cost $2,500; L. H. Daniels, contractor (under way): E. H. Staley, story and a-half summer cottage, Lake-side, cost $800 (completed). Cushwa Bros., three-story brick store building, 22 by 90 feet, cost $5,000; U. M. Palmer, contractor. Thorntown High school, three-story brick, cost $1,400; G. L. Fatout, contractor.

Green Bay, Wis.—The building boom has not reached this locality, and business has been rather quiet.

Architect J. McDonnell: Courthouse, Delta Co., Mich., two stories and basement, basement stone, superstructure pressed brick with sandstone trimmings, slate roof, 60 by 75 feet, cost $26,000; J. B. Sweatt, Chicago, contractor. Geo. W. Lamb, two-story frame residence, stone basement, 42 by 74 feet, cost $5,200; Kendall Manufacturing Company contractors (just completed). Catholic Bishop, Young Ladies' Seminary building, three stories, brick with stone trimmings, 62 by 42 feet, cost $5,700; done by day's work. Lutheran Society Church, superstructure wood, 34 by 64 feet, cost $4,100; A. Green, contractor (just commenced). J. McDonnell, two-story dwelling, superstructure wood, 36 by 64 feet, cost $4,500; done by day's work (just ready for plastering.)

Indianapolis, Ind.—Architect E. H. Ketcham; Plymouth Congregational Church, two stories, brick, tile roofing, theatrical in design, 65 by 130 feet, cost $22,000; Jungclaus & Schnmacher, contractors (just up to second story). W. S. Garber, frame dwelling, cost $3,000; same contractors (near completion). C. H. Walcott, frame dwelling, cost $4,500; J. A. Buchanan, contractor (near completion); Christian Church, Bloomington, Ind., brick with slate roof, 48 by 92 feet, cost $10,000 (receiving bids). J. H. Smart, Lafayette, Ind., nine-room dwelling, cost $3,500 (drawings being made). Insane Asylum, Logansport, Ind., stone in detached buildings, cost $400,000. Insane Asylum, Richmond, Ind., stone cottage system, cost $400,000. Insane Asylum, Evansville, Ind., brick, radiating system, cost $400,000. (Surveys are being made for above). Hendricks county courthouse and jail, steam heating, cost $4,000 (opened for bids September 5). Public School, Richmond, Ind., brick, stone and terra cotta, cost $22,000; Kelter & Beedle, contractors (under construction). Presbyterian Church, Vincennes, Ind., brick, stone and terra cotta, cost $12,000 (projected). A. J. Thomas, city, two-story frame building, cost $3,500; J. Callender contractor (under way). City of Indianapolis Hall, three stories, brick and stone, seating capacity of hall 6,000; 195 by 250 feet, cost $200,000 (projected).

Joliet, Ill.—The present outlook for building is good but not quite up to last season's measure.

Architect H. Boelime: Geo. H. Munroe, two dwellings, cost $5,000. St. Mary's Convent, brick with stone trimmings, cost $20,000. F. H. McRoberts, dwelling, cost $4,000. Dr. Chesseman, dwelling, cost $4,000. R. M. Brag, dwelling, Anderson pressed brick, terra cotta trimmings, cost $12,000. City of Joliet, school building, cost $15,000. German Lutheran Church, stone, cost $14,000. J. McFadden, livery stable, cost $5,500. T. W. Woodruff, brick office building, cost $5,000. City of Joliet, engine house, cost $1,000. H. C. Callan, remodeling residence, cost $10,000. C. Sweiger, stone building, cost $6,000. R. Walsh, stone building, cost $4,000. Catholic Church, Lemont, frame, cost $9,000. Convent schoolhouse, same place, stone, cost $8,000. W. H. Chettencled, Plainfield, residence, cost $4,000.

Architect O. Johnson: E. S. Monroe, three-story building, 67 by 120 feet, walls of stone, front of galvanized iron (very ornamental), tin roof, cost $25,000; mason work by E. Erickson, other work by the day. J. E. Bush, three-story stone machine shop, galvanized iron front, 70 by 96 feet, cost $10,000; mason work by P. Wenberg & Co.; other work by the day.

Kansas City, Mo.—Business is not up to the standard of earlier expectation but on the whole is satisfactory. While very few business buildings will be put up this season, a large number of dwellings are projected.

Architect Chas. H. Mansfield: H. Barnes and C. A. Brackett, four stories above basement, with brick walls trimmed with Warrensburg stone, tin roof; first story contains store, large dining-room, kitchen, and suite of four rooms with private bathroom; second and third stories contain four suites of four rooms, one suite of five rooms, and one suite of two rooms to each floor, also three private and two public bathrooms to each floor. Building is to be heated throughout by steam and provided with passenger elevator, cost $50,000; done by day's work (walls up to the sidewalk, to be completed February 1, 1884.)

Architect S. E. Chamberlin: W. B. Goodkin, three-story brick store, cost $3,500. C. J. Lee, two-story brick dwelling, cost $2,500. D. Updegraff, three-story brick store, cost $5,000. (Projected.)

Minneapolis, Minn.—Just at present there is a lull with the architects, but the outlook for the autumn is good.

Architects Geo. W. & F. D. Orff: Day Brothers, three four-story brick stores, 66 by 84 feet, cost $33,000; Hazlin & Morse, contractors. Joseph Menard, two four-story stores, 50 by 104 feet, cost $25,000, L. Tuillefee, contractor. Joseph Fall, four three-story brick stores, 83 by 60 feet, cost $20,000; Hazlin & Morse, contractors. Lunde & Mendal, brick bank building with basement, 44 by 44 feet, cost $8,000; W. W. Witmore, contractor. Same parties, two three-story brick store buildings, 44 by 75 feet, cost $12,000; same contractor. Chas. Robinson, two-story brick veneered dwelling, 47 by 63 feet, cost $15,000; by the day. J. C. Llafter, three two-story and basement brick veneered houses, 64 by 38 feet, cost $12,500; B. F. Abbott, contractor. Jas. Patten, two double frame houses, 46 by 53 feet, cost $10,000; S. C. Cutter, contractor. W. F. Brackett, two double and one single frame houses, 40 by 58 feet and 40 by 50 feet respectively, cost $12,000; A. J. Warren, contractor. S. Rothschild, double frame house, 44 by 53 feet, cost $5,500; by the day. H. Dennis, double frame house, 41 by 46 feet, cost $5,000; Hazlin & Morse, architects. Chas. Johnson, double frame house, 40 by 46 feet, cost $5,400. G. N. Warren, frame dwelling, 33 by 43 feet, cost $8,800; B. F. Abbott, contractor. C. W. Weeks, frame dwelling, 33 by 47 feet, cost $3,500; by the day. (All

the above now building). W. S. Benton, frame dwelling, 40 by 71 feet, cost $10,000; B. Cooper, contractor. J. R. Purchas, brick laundry, four stories, 25 by 120 feet, cost $20,000; Hazlin & Morse, contractors. (Above just completed.) J. M. Shaw, two-story brick dwelling, 55 by 76 feet, cost $25,000. A. F. Foster, frame dwelling, 33 by 54 feet, cost $4,000. (Projected.)

Architect C. F. Struck: Martin Ferrant, block of four stores, stone basement and brick superstructure, fronts St. Louis pressed brick and Ohio bluestone, 33 by 80 feet, to be used as stores and offices, cost $18,000; various contractors (foundations in). John Bauman, three-story brick with stone basement, 23.6 by 100 feet, cost $12,000; various contractors (ready for roof). John D. Myer, three-story brick, brownstone facing, 71 by 100 feet, cost $21,000 (excavating not let).

Ottumwa, Ia.—Business quiet, but expectations are good.

Architect Ernst Koch: Chas. Sax, four-story brick building, with stone trimmings, tin roof, 44 by 132 feet, cost $1,800 (Diedrich arch); Scott and Capell Bros., contractors. Manager Potter, C. B. & Q. railroad, four-story brick, with stone trimmings, 66 by 118 feet, cost $22,000; various contractors. John Hausmann, three-story brick brewery, 90 by 110 feet, cost $25,000; various contractors. Two-story and basement schoolhouse, slate roof and tower, 80 by 80 feet, cost $26,800. E. Chambers, Albia, Ia., two-story frame residence, cost $5,000. G. Creamer, same place, three-story brick hotel, 60 by 110 feet, cost $22,000. (All the above under way.)

Architect Edward Clark: W. E. Chambers, one-story basement and mansard dwelling, brick, trimmed with stone, block brick and other ornamental brickwork, facing pressed brick, roof slate and trimmed with galvanized iron, will be fitted with gas, hot and cold water, bathroom, mantels, etc., area dimensions 38 by 54 feet, cost $32,000; J. J. McDaniels, contractor. Dr. L. E. Rogers, two-story frame residence, nine rooms, 28 by 42 feet, cost $2,400; Wm. Donaldson, contractor. Rev. B. E. S. Ely, two-story frame residence, 26 by 38 feet, cost $2,100; J. Hall, contractor. (All in course of construction."

St. Louis, Mo.—Architect E. Jansen: Klausman Brewing Co., brick malthouse, cost $20,000; contract sublet.

Architect T. Rennich: A. M. McChesny, two-story brick dwelling, cost $5,000; C. Gebhardt, contractor.

Architect E. Mortimer: W. N. Graves, two-story brick dwelling, cost $7,000; C. Wehking, contractor.

Architect J. B. Legg: Famous Boot and Shoe Co., four-floor building, stone front, 60 by 150 feet, cost $35,000; let separately (cellar dug). State Normal School building, three stories, brick, additions and changes, cost $12,000 (joists on first story); J. C. Guston, contractor. Joplin public school, two-story brick, 72 by 80 feet, cost $13,000 (first story up). Court-house, Cicily, Ill., two-story brick, 41 by 120 feet, cost $12,000; taking bids. Public school, Murphysboro, two stories, eight rooms, 70 by 80 feet, cost $10,000; taking bids. Academy of Music, Fort Smith, Ark., two stories, brick, 60 by 110 feet, cost $18,000 (roof on). F. B. Meyers, two-story stone front store building, 58 by 120 feet, cost $8,000 (cellar dug). Mrs. H. Bees, three-story stone building, flats, 60 by 90 feet, cost $25,000 (just completed). Chas. P. Wise, three-story stone front residence, 50 by 65 feet, cost $12,000 (plastering done). E. J. Hanson, four three-story stone front dwellings, 80 by 65 feet, cost $16,000 (nearly finished). H. C. Ashley & Co., Helena, Montana, three-story brick, store and offices, 58 by 135 feet, cost $28,000. R. S. Hale, same place, two-story brick store, 60 by 100 feet, cost $14,000. B. H. Reaves, Joplin, Mo., two-story brick store, 45 by 60 feet, cost $6,000 (cellar nearly done). A. S. Bridges, two-story brick and stone building, 35 by 60 feet, cost $7,000 (roof on). W. W. Trigg, Brownsville, Mo., two-story brick building, 45 by 55 feet, cost $5,500 (cellar dug). V. Miller, Centralia, Mo., two-story frame dwelling, 48 by 56 feet, cost $6,000 (roof on).

Architect E. Mortimer: T. B. Moore, five two-story, seven-room houses, brick, cost $11,300. Chas. Baur, stone front, ten-room house, cost $6,200. J. T. Cole, stock brick house, cost $2,500. The St. Louis Building Co., three houses, average $8,500 (completed). All the others under way; J. V. Majors, contractor.

St. Paul, Minn.—Architects have some leisure; builders are hunting up more work, prospects flattering.

Architect H. Ticheme: C. E. Judd, two-story frame residence, cost $2,350; D. D. Doyle, contractor. J. W. Enwright, two-story frame residence, cost $2,600; B. J. Grimshaw, contractor. Dries & Koch, two three-story brick stores, cost $13,000; D. D. Doyle, contractor. Brick church at Cold Springs, Minn., cost $13,000; day labor. R. Price, three-story brick residence, cost $10,000. Horace Pickett, three-story business block, Fergus Falls, Minn., cost $33,000. Robert Jamison, Minneapolis, two-story brick residence, cost $5,000. J. T. A. Williams, two-story frame boarding stable, cost $7,000. A. B. Robbins, Merriam Park, two-story frame residence, cost $3,800. Frame church, Brainard, Minn., cost $7,500. Richard Price, two-story brick building, cost $7,225. (All the above under way). Bishop Grace, Mortuary Chapel, Calvary Cemetery, cost $3,000. P. V. Brown, three-story brick store, cost $10,600. Geo. P. Metcalf, two-story frame residence, cost $3,000. W. F. Wilson, same, cost $3,000. Church, Belle Plaine, Minn., brick, cost $7,000. Jas. Blaike, three double frame residences, cost $12,000. W. L. Kelly, frame residence, cost $4,000. Church at Oakdale, Minn., brick, cost $8,000. (All above projected, and fourteen other brick and frame buildings under way and near completion, ranging from $2,000 to $3,500).

Toledo, O.—Building rather brisk and outlook fair.

Architect A. B. Bacon: Carrington & Cummings, five-story and basement brick office building, 60 by 114 feet, cost $60,000; E. Malone, contractor. Estate of E. Wullridge, four-story and basement wholesale building, brick, 60 by 75 feet, cost $21,000. Mrs. J. B. Waite, two-story brick dwelling, cost $7,000; J. V. Sunfleet, contractor. S. S. Laskey, two-story and basement brick dwelling, cost $15,000; brick stable, cost $3,000; H. J. Platfoot & Co., contractors. H. Tracy, two-story and basement brick dwelling, cost $9,000; M. A. Stengenga, contractor. Secor, Davis & Brown, four-story addition to Burnett House, cost $16,000; E. Malone, contractor. S. H. Morgan, two frame dwellings, cost $6,000; C. Freund, contractor. C. L. Smith, frame dwelling, cost $3,000; John Kerrnish, contractor. (All the above being finished or under way). Keitt & Hartuppe, four-story wholesale building, brick, 72 by 116 feet, cost $23,000 (projected).

Winona, Minn.—Present condition good, but not so many buildings projected as earlier in the season. The outlook for 1884 is very encouraging.

Architects C. Y. Maybury & Son: Schoth & hren, three-story mill, frame and brick, 60 by 110 feet, cost $10,000; Jno. Keenan, contractor. Frank Yourmans, two-and-half stories, frame residence, 37 by 50 feet, cost $6,000. Mrs. A. Simpson, two-story frame residence, cost $3,500. M. H. Cornwell, ditto, cost $3,000. J. Jaltz, two-and-half stories, brick, cost $3,500. S. Brammer, two-story frame, cost $2,500; Rose & Larabee contractors for above. Jno. Dobbs, two-story frame residence, cost $3,500; Norman & Stellwanger, contractors. Jno. Latsch, two-and-half stories, brick residence, cost $6,000; N. Munck, contractor. W. M. Hulburt, two-story brick shop, cost $6,000, and several other smaller dwellings ranging from $2,000 to $3,000. Court-house, Caledonia, Minn., stone, cost $32,000. First Presbyterian Church, La Crosse, Wis., cost $25,000. E. Thorsted, store building near La Crosse, cost $6,000. School building, Owatonna, Minn., cost $22,000. School building, Clark, D. T., cost $5,000. Academy, Rochester, Minn., cost $6,000. Block of three-story stores, Faribault, Minn., cost $12,000. Town hall, Tracy, Minn., cost $8,000. (All the above under way).

Not planned in the above office: Harvester Works, two and three stories, 50 by 140 feet, cost $35,000. Railroad machine shops, 100 by 260 feet, two stories, cost $25,000. Railroad freight depot, 40 by 260 feet, cost $10,000. Water tower for city, 12 feet diameter and 225 feet high.

Kansas City, Mo.—Architect L. L. Levering: H. P. Stevenson, two-story brick residence, cost $5,600; W. Everhart, contractor. J. C. Allendorph, two-story brick residence, cost $4,600, J. F. Marks, contractor. J. F. Marks, two-story brick residence, cost $5,500 (first two under way, last completed). J. B. Humphrey, two-story brick dwelling, cost $5,650 (receiving bids). Christian church, Marshal, Mo., brick, with stone trimmings, 50 by 50 feet, cost $13,000 (under way); E. J. Page, contractor. Besides the above there are under way and completed fourteen other brick and frame dwellings ranging from $2,750 to $3,700, aggregating in cost $41,600. Among the projected buildings is a Stock Company Hotel, six stories high (368 rooms), walls of brick and terra cotta, at a cost of $225,000.

Des Moines, Ia.—Architects B. J. Bartlett & Son; Presbyterian church, Greenfield, Ia., frame, to cost $5,000 (plans just completed). Congregational church at Schuyler, Neb., frame, to cost $4,000 (plans just completed). For R. G. Phelps, Missouri Valley Junction, a frame dwelling, to cost $3,000. Residence for Rev. R. G. Scott, Forty-fourth and Winter streets, Chicago, frame, to cost $3,000.

Winona, Minn.—Architect Chas. B. Cook: Court-house and jail at Huron, Dak., 80 by 115 feet, brick, with stone trimmings, cost $50,000; John Vaughan, contractor. Court-house, Whitehall, Wis., brick, with stone trimmings, cost $25,000; Kratz & Payer, contractors. For Winona Harvester Works, building, 260 by 50, three stories; engine house, foundry and blacksmith shop, brick, cost $65,000; John Lohse, contractor. Dwelling for Mrs. F. A. Smith, Winona, cost $11,000; Kratz & Payer, contractors. Dwelling for J. Ford Pudor, Winona, cost $8,000 (not contracted).

Minneapolis, Minn.—Architect Edwin S. Stebbins for S. P. Channell at Minneapolis, five brick stores, 120 by 60 feet. The foundations are in. Cost $22,000. (Foundations in). County jail, Willmar, Minn., brick, steel lined cells, 40 by 60 feet, cost $21,200, under way; Herzog & Co., contractors. Normal school, Madison, Dak., brick, three stories, cost $20,000. A cottage at Winnetonka Lake for R. M. Warner, of Minneapolis, cost $2,000.

Inventive Genius in Building.

282,517. Door-lock. J. Jonas Helsing, San Francisco, Cal.
282,560. Carpenter's bevel. Charles E. Overend, Portland, Oregon.
282,562. Lightning-rod. Theodorus H. Patee, Greencastle, Ind.
282,574. Hinge. Alfred L. Scranton, Western Springs, Ill.
282,637. Hasp-lock. John C. Boggs, Auburn, Cal.
282,636. Rat-proof building. Joshua Hicks, Sandford, Ind.
282,641. Skylight. Peter H. Jackson, San Francisco, Cal.
282,716. Adjustable window-screen. George W. and William Gordon, Detroit, Mich.
282,726. Chimney-flue stopper. Jonathan R. Higgins, Lima, Ohio.
282,740. Fireplace. David S. Loe, Poorman, O.
282,763. Elevator. Edwin L. Parker and Samuel Peterson, Queensville, Ind.
282,800. Ventilator. Daniel B. Taylor, St. Louis, Mo.
282,807. Preserving and protecting piles. David H. Valentine, Brooklyn, N. Y.
282,812. Fireplace grate. Stewart Watt, Barnesville, O.
282,822. Smoke and flame outlet for buildings. Charles A. Willard, West De Pere, Wis.
282,831. Developing or tracing machine. Frank Aborn, Cleveland, O.
282,858. Spring-hinge. L. M. Devore, Freeport, Ill.
282,892. Fire-escape. Henry Hitchcock, Genesee, Mich.
282,905. Elevator-hatchway guard. Emerick Kiss, New York, N. Y.
282,928. Sash-holder. Frank L. Rosentreter, Cleveland, O.
282,961. Bench-clamp. Thomas Crispin, Detroit, Mich.
282,977. Combined register and ventilator. Abraham D. Gallentine, Marion, Ind.
282,993. Spring hinge. Henry P. Kochsmeier, Freeport, Ill.
283,008. Fire-escape ladder. Chas. T. Merritt, Hyde Park, Ill.
283,012 Securing slabs of veneering to buildings. Benjamin Morton and Arthur Tilley, Toronto, Ontario, Can.
283,038. Fire-escape. Isaac L. Stover, Centralia, Ill.
283,074. Manufacture of wrought iron. Lucius D. Chapin, Chicago, Ill.
283,105. Flushing-tank for water-closets, urinals, etc. Thos. Henderson, Nashville, Tenn.
283,110. Elevator safety-catch. Alexander C. Hope, Cartersville, Ind.
283,128. Lock-hinge. Egbert E. Masters, Woodland, Cal.
283,133. Fire-proof lining for boxes, safes, doors, shutters, vaults, etc. Luke H. Miller, Baltimore, Md.
283,134. Knob-attachment. William N. Mills, Truro, Nova Scotia, Canada.
283,158. Fire-escape. Peter Smith, Cato, Kans.
283,166. Insulated metallic roof. Henry C. Thomas, Rock View, N. Y.
283,172. Water-closet. Richard Walsh, Detroit, Mich.
283,184. Brick machine. William Woodward and Abel B. Woodward, Nashville, Tenn.
283,203. Cant-hook. Jesse Carpenter, Wyman, Mich.
283,208. Door-hanger. William Brown Cogger and Henry A. Hamlin, Minneapolis, Minn.
283,214. Builders' Scaffold or Mortar-Board. Samuel Dale, Boonesborough, Iowa.
283,277. Hinge. Alonzo L. Porter, Chicago, Ill.
283,279. Door-hanger. Edwin Prescott, Arlington, Mass.
283,300. Hydraulic Pile-driver. Joseph W. Surprenant and James E. Ferguson, Astoria, Oregon.
283,319. Bevel attachment for Hand-saw. Emanuel Andrews, Williamsport, Pa.
283,332. Skylight. John Ehrhardt, St. Louis, Mo.
283,357. Ratchet-wrench. John Williams Pruitt, Russellville, Ark.
283,358. Manufacture of Artificial Stone. Harriott H. Ravenel, Charleston, S. C.
283,365. Sash-fastener. Frederick Dudley, Eugene City, Oregon.
283,366. Brick-machine. James C. Anderson, Highland Park, Ill.
283,372. Machine for making Blind-slats. Joseph W. Brainard, Kent, O.
283,378. Pipe-wrench. Geo. W. Cook, Chicago, Ill.
283,379. Hammer. Geo. W. Cook, Chicago, Ill.
283,404. Weather-board Gauge. Jesse M. Keith, Maiden Rock, and Simeon R. Bolton, Trim Belle, Wis.
283,431. Elevator. Wilson R. Smith, Beloit, Wis.
283,502. Fastener for the meeting-rails of sashes. Philip Mathes, Idlewood, Pa.
283,517. Vault-cover fastening. Christian Hansen Ross, Chicago, Ill.
283,530. Fire-escape ladder. Geo. A. Swartz, Orangeville, Ill.
283,565. Brick-Pressing machine. George Carnell, Philadelphia, Pa.
283,580. Mechanism for raising lines to the upper parts of buildings. Geo. O. Daw, New York, N. Y.
283,592. Ornamenting surface of walls, ceilings, paper-hangings, etc. Gustave Giersberg and Richard Wirth, New York, N. Y.
283,617. Fire-escape. Handley B. Kimhall and Cornelius S. Barrett, Charlotte, Mich.
273,650. Fire-escape. Madison M. Ormsby, David City, Neb.
283,675. Wrench. William J. Sherman, St. Augustine, Fla.
283,702. Fire-escape. Horace D. B. Cuttler, Glenwood Mo.
283,719. Knob-attachment. John B. Morris, Cincinnati, O.
283,756. Steam-generator. Wm. Cooper, Chicago, Ill.
283,758. Brick-mould. Alexander F. Crowe, Emporia, Kan.
283,776. Lock. Frank Augustus Guthric, Gallipolis, Ohio.
283,789. Fire-proof material for filling safes, doors, etc. George Kelly, Chicago, Ill.
283,892. Eaves-trough hanger. Clinton D. Hyre, Lexington, Ill.
283,908. Roof-scaffolding. Aaron R. Manly, San Jose, Cal.
283,913. Skylight. James McIntyre, Boston, Mass.
283,929. Machine for sawing stone. David Shortsleeve, Rutland, Vt.
283,941. Window-blind. Joseph Williams, San Jose, Cal.
283,946. Sash-balance. George Wilt Arnold, Knoxville, Ill.
283,968. Fire-escape. Henry B. Church, Grand Rapids, Mich.
283,996. Art of extinguishing fires. Charles Lyman Garfield, Albany, N. Y.
284,015. Wrench. Isaac Q. Holmes, Clarksville, Ark.
284,038. Sawing-machine. George McCoy, New Dungeness, Wash. Ter.
284,088. Fire-escape. John G. Thomas, Newark, Ohio.
284,106. Apparatus for utilizing the waste heat of stove-pipes and chimneys. Hiram M. Wheeler, Smithson, Ind.
10,377 (*Reissue*). Water-closet. George Milne and William H. Gants, San Francisco, Cal.

A WRITER claims that yellow pine, hard-finished in oil, is the rival in beauty of any wood that grows, not excepting the costliest hardwoods. It is susceptible of receiving and maintaining as high a degree of polish as any wood with which we are familiar, and as to durability, when thoroughly impregnated with oil, it may be said to be almost everlasting. In such a condition it is impervious to even hot grease and other substances that leave an ineffaceable stain upon white pine, maple, and various other woods. Flooring for use under carpets should be largely sap, and when exposed either for inside or outside use, should be as near all heart as possible. For inside trimmings, wainscoting or panel work, the curly variety is at least superior to either cherry or birdseye-maple.

WM. DODD, who recently took charge of the architectural work in the office of the chief engineer of the Northern Pacific Railway, at Portland, Oregon, is fully meeting the expectations of his friends in Chicago.

New Publications.

A SERIES OF RELIEF-DESIGNS, REPRESENTING ARCHITECTURAL AND SCULPTURAL ORNAMENTS AND THEIR HISTORICAL DEVELOPMENT. By PROF. S. E. CLEAVES, Cornell University.

These lessons are arranged in a series to give,—first, simple elements; second, representative combination of elements in a complete design; third, a reproduction from memory; fourth, a combination of the same elements in original design; and fifth, the methods of drawing from objects and nature. The series consists of six books.

A SERIES OF ELEMENTARY MECHANICAL DRAWING. By FRANK B. MORSE, of Massachusetts Institute of Technology.

This series contains a full description and illustration of the use of instruments, the conventional method of representing materials, and the method of projections. It includes the whole elementary mechanical course usually pursued in technical schools. The work commends itself to advanced students in public or other schools, and especially to young mechanics who have not the opportunity or time to take a course of lessons in mechanical drawing.

DIO LEWIS' MONTHLY. New York: CLARKE BROS.

This is the first issue of a new magazine by the well-known Dr. Dio Lewis. Its aim is to popularize sanitary science and to make the subject not only interesting but comprehensible by the everyday reader.

"STEEL SQUARE PROBLEMS," together with a large number of geometrical demonstrations of practical value to mechanics, illustrated by sixty engraved plates by Lucius D. Gould, author of "Carpenters and Builders' Assistant" and "American Stair-Builders' Guide." This, which is a revised and enlarged edition of a former work by the same name, gives explicit instructions for an easy solution of such problems as ascertaining the lengths and angles for cutting braces, rafters, etc., mitering hoppers of any number of sides, to any desired elevation; finding angles for and mitering polygons of any number of sides; mitering a raking to a level moulding by the use of the square and miter-box; finding distances to inaccessible objects; making widths of steps and risers for easy stairs, etc. Price $1. Trade supplied by WM. T. COMSTOCK, 6 Astor Place, New York.

Our Illustrations.

Page 111, by Architect Clarence L. Stiles, schoolhouse at Elgin, Illinois.

Page 107, by Architect F. Wm. Fieder, bits of interiors. A mantel designed by Mr. Fieder and erected in the editorial rooms of "The Century" is a fine sample of mantel designing.

Page 111, by Architect George W. Rapp, Cincinnati, Ohio, a sketch of Mr. Conrad Windish's block of six dwellings, being erected on corner of Ohio avenue and Calhoun street, Cincinnati, Ohio. The building will be of pressed brick with Ohio Freestone trimmings, to cost $40,000.

WE have received a sample of Shepard's car and furniture polish for polishing hardwood surfaces. It is especially valuable because of its facility of application, as without the customary rubbing it gives to the surface of hard woods a perfect and permanent polish. It has been used for several years on the Wagner and Pullman cars, and its value as a polish for general use is testified to by many persons of prominence. The office of the manufacturers is at Room 2, 146 Monroe street.

An English Dollar.

SAVANNAH, GA., August 4, 1883.

To the Editors of the American Architect:

GENTLEMEN: A friend handed me an English coin, of which the enclosed sketches are free-hand copies, and asked for any information concerning them that I could give. Being unable to give him any information in the premises, I made a rough copy to send to you, thinking perhaps that you or some of your numerous correspondents could give the history of the coin. The owner has shown it to some English and Scotch gentlemen here, some of whom stoutly denied that there ever was an English dollar, until convinced to the contrary by an inspection of the silver piece.

Very truly yours, JOHN J. NEVITT.

[The sketch shows a coin with head of George III on one side, and inscription: "GEORGIUS III, DEI GRATIA REX": and on the reverse, an oval band with a crown above it, encircling a figure of Britannia seated, with cornucopia and shield. On the upper part of the band is inscribed: "FIVE SHILLINGS," and at the bottom, in the same lettering, "DOLLAR." Around the whole is the inscription: "BANK OF ENGLAND, 1804." Some of our readers, more familiar with dollars than ourselves, may perhaps recognize this coin.—*Eds. American Architect.*

Although our subscription list does not date back to 1804, and we therefore are familiar with coins of more recent date, we have in our possession an English dollar, such as described by your correspondent, Mr. Nevitt. An English lady brought thirty of that date (1804), from England, in 1868, they being part of a legacy left by a deceased aunt, and had probably occupied a "stocking" for many years. We are pleased to thus be able to certify to the coinage of English dollars in 1804, and to the fact that though editing an architectural journal we *have* seen a silver dollar.—EDITOR INLAND ARCHITECT AND BUILDER.

OBITUARY.

Harry Fox.

THIS well-known gentleman died of apoplexy at Salt Lake City, September 5. Since 1852 he has been prominent in all public works, not only in Chicago, but throughout the Northwest, especially in railroad building and bridge construction. The funeral, which took place from Unity church, Chicago, on Monday the 10th inst., was attended by fully five hundred people, nearly all being personal friends of the deceased. The coffin, the lid covered with cut flowers, was in front of the platform, on which were several large pieces—a slab of roses, sent by the Iroquois Club; a broken column of roses on which was "F." and "C." (FitzSimons & Connell) "to Harry"; a wreath from Potter Palmer, an anchor, a basket, and a collection of cut flowers. The choir sang "One Sweetly Solemn Thought," and after the Rev. George Batchelor had read appropriate selections from the Bible he made a few remarks, speaking of the strength, generosity, courage, and tenderness of the deceased, and saying that he loved his work, putting his heart and conscience into it and doing it as a man ought, and thus served God. A prayer and another hymn—"Rest for the Toiling Hand"—ended the services. The remains were followed by nearly one hundred carriages to Rosehill, where they were buried.

A SHUTTER AND BLIND OPENER is a recent invention. A handle projecting from the window casing inside the room controls a bar tha truns to the outside of the window and bears at its extreme end a cog-wheel, which is attached to the blind or shutter and is also joined by means of a slender steel rod to the slats. By simply turning the handle one may either open the slats or close the entire shutter.

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THE INLAND ARCHITECT AND BUILDER.

Vol. II. No. 3

OCTOBER, 1883.

THE

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IN THE WEST.

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L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

ANOTHER warning to architects who are inclined to respond to invitations to make competitive plans for public structures comes to us from St. Louis, and is particularly fruitful because of the well known architects who trusted and were betrayed. The following is an extract of the "invitation" sent out by the management of the St. Louis Exposition and Music Hall Association, the remainder relating to the description of building, specifications, etc. It is signed by Henry L. Lucas, secretary, and is, as a whole, a fair specimen of the documents sent to architects asking them to spend their time, talent and money in competing where there is not even a chance for honorable treatment, much less recompense for their outlay. The more interesting "resolutions" passed by that body of business men were:

First, That all architects, residents of this city, and five non-residents, be invited to prepare and submit designs.

Second, That those presented by residents, seven, which shall be considered the most meritorious, shall be accepted and awarded five hundred dollars ($500) each, and the five presented by non-residents, shall each be awarded the same amount. All designs for which you pay five hundred dollars ($500) shall be the property of the association.

Third, That it shall be understood, that any foreign architect may submit a design, but if not accepted as the most meritorious of all, he will receive no compensation, and his design shall be returned.

Fourth, The architect who is successful shall not receive five hundred dollars, but he shall be engaged as architect and superintendent, and shall be paid, for performing such duties, the usual commissions, as adopted by the American Institute and the St. Louis Institute of Architects.

The result of this was as we have indicated. The architects, especially of St. Louis, "bit" at the proposition, not so much for the prizes, but because of their architectural pride in their city, only three, as far as we can learn, responding from outside St. Louis, two being from Chicago and one from Boston. After the plans were all in, we find that the main prize the board of directors *claim not to have awarded to any of the competing architects*, as no plan sent in was just what they wanted. They have, on this ground, claimed the right to withdraw the main prize and make such distribution of it as they thought best. In regard to the minor prizes, they then voted them to those plans, in their judgment, they regarded the best. By this it will readily be seen that no architect could, by *any means*, *secure the honor* which all were supposed to be competing for. Having taken this action, they then entered into negotiations with architect J. B. Legg to make a set of plans for them, combining such points as *they* might think proper to extract from the several plans they had secured in this manner, at the same time arranging with this architect that he should have nothing to do with the superintending of the building; this was placed in the hands of a Mr. Givens, a builder. It is understood that the architect gets *$6,000* for his part of the work, and the builder *$12,000* for his personal attention to the construction of the building. To decide upon the merits of the several plans sent in, the board called to their assistance one *civil engineer* and one *builder*, the builder being the one mentioned as superintendent. The plans now being made are in no particular like the plans sent in by the architect appointed, nor do they correspond in any important feature, but are a combination of the plans of two other competitors, the attempt seemingly to be to place one architect's elevation on the other's ground plan. These are the main facts in the case, as far as we have been able to gather them, the board of directors refusing to give out any information about their proceedings. It is stated on good authority that the board deny having voted that a certain well known architect's plans were the best, though it is well known that they were at work on a contract which they wanted to make with that gentleman to construct the building for a given amount of money, binding him to construct the building without extra cost to them. This was, of course, placing him in the light of a contractor and not an architect, and, like the honorable man he is known to be, he refused.

We hope that this latest attempt of business men to secure architectural services for nothing and by departure from professional rules will be a wholesome lesson to all architects of standing. The only way it can be stopped is by architects, one and all, positively declining to enter into competition, and thus forcing the directors of public enterprises to pay for plans at their regular price, and in no case draw a plan before it is ordered, the price stipulated and the credit of the parties who order fully investigated, as in any mercantile transaction. Otherwise, when these tempting proposals come, do as a prominent architect of Chicago recently recommended in a newspaper article in reference to such competitions, that "it is much the better plan and much cheaper for architects to simply send in their cards in response to such invitations." As the facts show, the St. Louis business men promised well, and as business men they secured the most they could for the least money, but kept their promises in no particular, as by agreement the architect should receive $14,000, and the superintendent $6,000, at least. While we sympathize with the architects, we would say, as we have on many other like occasions, and will reiterate,—stick to the rule of the American Institute of Architects, and let all competitions pass as unprofessional.

WHAT good will come out of the sittings of the Senate's committee on labor and education is a problem yet to be determined. So far, the work of the committee has seemingly been to rock extremists' hobbies for them. Every witness called has looked through his particular bit of colored glass and testified according to its special tint. Dr. Norvin Green and Jay Gould believe the labor interests are bound up in the consolidation and extension of the Western Union telegraph system. Mr. Fink, that the best interests of the country, which of course include that of labor, are best subserved by a railroad pool which prevents railroads from competing with each other; Mr. Roach, that the way out of the labor dilemma is through the revival of American shipbuilding, and so on *ad infinitum*. All seem to be aware there is a sentiment prevalent with the working-class that capital and labor are at swords points, but inferentially, where not openly declared, allege that labor is the unreasonable aggressor, as, were it not for capital labor would lack employment, a truth as true as that had it not been for labor capital (money) never would have had the privilege by its existence to have been such a benefactor. It may be that the committee may, after weighing all the oral testimony that has come before it, look up some documentary evidence, such as the census report of 1880, and in that way get additional light thrown upon this question of disquietude among the workingmen, as for instance, from the facts set forth in the following tables, collated therefrom by the *Scientific American* of a late date, showing the number of establishments in the various principal industries in the United States, the number of hands employed, aggregate wages paid, value of material used, value of annual product, and total capital invested:

INDUSTRIES.	Hands employed.	Wages paid.	No. of establishments.
Iron and steel	306,958	$128,787,924	6,498
Lumber and wood	244,926	79,844,837	38,090
Cotton and mixed textiles	228,845	58,931,172	1,475
Men and women's clothing	185,945	52,541,358	6,728
Woolen goods	169,897	49,259,324	3,390
Boots and shoes	128,635	52,252,127	18,390
Carriage and smithing	104,718	38,185,271	43,122
Tobacco, etc.	87,587	25,054,457	7,674
Brick, tile, etc.	67,203	13,764,723	5,697
Furniture and upholstery	64,127	25,571,831	6,087
Leather, harness, etc.	63,136	25,081,913	13,708
Printing and publishing	62,800	32,838,959	3,634
Flour and gristmill products	58,401	17,422,316	24,338
Agricultural implements	39,980	15,359,610	1,943
Shipbuilding	21,341	12,713,813	2,188
Totals	1,834,499	$627,609,635	182,962

INDUSTRIES.	Value of annual products.	Value of materials used.	Total capital.
Iron and steel	$551,543,109	$319,594,960	$405,636,070
Flour and gristmill products	505,185,712	441,545,225	177,361,878
Lumber and wood	407,615,968	248,986,332	242,248,783
Cotton and mixed textiles	277,172,086	150,993,218	259,500,851
Woolen goods	271,916,746	166,640,753	160,798,466
Men and women's clothing	241,553,254	150,922,509	88,068,969
Leather, harness, etc.	241,056,230	177,821,175	91,310,030
Boots and shoes	207,387,903	122,542,745	56,548,665
Carriages and smithing	139,410,873	57,522,275	76,088,143
Tobacco, etc.	118,670,166	65,384,407	39,995,292
Printing and publishing	97,701,679	35,216,159	67,485,529
Furniture and upholstery	85,004,618	40,005,090	47,231,529
Agricultural implements	68,640,486	31,531,170	62,109,668
Shipbuilding	36,800,327	19,736,358	20,979,874
Brick, tile, etc.	33,868,131	10,119,538	28,659,329
Totals	$3,283,527,288	$2,038,561,914	$1,824,023,076

Taking the first table and dividing the total wages paid by the total number of hands it would find the average wages paid per annum was $342.11, or $6.57 per week.

Taking the second table, the total value of products as stated, $3,283,527,288. Deducting the value of materials used, $2,038,561,914, and wages paid, $627,609,635, leaves remaining $617,355,739 to represent interest and increase on capital invested of $1,824,023,076, or nearly thirty-four per cent on the capital and but $10,253,896, less than the whole amount paid for wages. In other words each workman, by his labor, added $678.64 to the value of the raw material he used, and received for his work $342.11. Dividing the whole amount of capital invested by the number of hands employed would find for each hand employed there was an investment of $994.28, the difference between the product of each workman's labor per annum ($678.64) and the wages he received ($342.11), amounting to $336.53, looks like a very good rate of interest on $994.28.

Again, they might consider whether the accumulation of immense wealth in few hands, and the uses made of it had any tendency to incite this sentiment of unrest, might consider the acts of great corporations like the Standard Oil Company, the Diamond Match Company, the Western Union Telegraph Company, with its $25,000,000 stock watered to $80,000,000, upon which it charges the public so as to declare ten per cent dividends on $55,000,000 that never was invested; the Pacific railway companies, endowed by the government with domains larger than many kingdoms in Europe and exceeding in value the cost of their roads, that charge the public all their patronage will bear without killing it, into the practices of the money magnates of the land, exemplified by the boast of the millionaire Stewart before he died, that he had a hundred merchants in his employ he had broken up. With such additional light as may be had by such a course of investigation, and recognizing it to be true what our *magna charta* says governments were instituted for, they can better determine how far the workingman, who labors for a bare existence, is wrong when he asks the government to protect him from being robbed by money as it now does from being robbed by muscle.

SINCE the issue of our last number a notable event has taken place in our city, namely, the laying of the corner-stone of the Chicago Manual Training School, situated on the corner of Michigan avenue and Twelfth street; notable not only from the fact that the edifice will be of no ordinary character in an architectural point of view, as we hope to show by an engraving in a future number, but from paramount fact that the school itself will be a radical change in the methods of instruction and nature of the knowledge imparted; knowledge that will prove of practical value when its pupils come to engage in the actualities of life. It is the purpose of the institution, by a three-years course, to teach mathematics, high-school English branches, carpentry, wood-turning, pattern-making, iron-chipping, forge-work, brazing, soldering, and the use of machine-shop tools, to practically and intelligently acquaint the pupils with these things, and the philosophy underlying them, so that when as artisans they undertake to do any work, they may do it as it ought to be done, in a skillful manner. The school will differ somewhat from ordinary polytechnic schools, as it will not teach specific trades, but prepare its pupils to enter the field of mechanical pursuits. Candidates for scholarships, boys of over fourteen years of age, will have to be of good moral character, and stand a good examination in the lowest branches of learning. The tuition fees will be very moderate, as the object of the enterprise is to aid boys learning and desirous to learn trades. This commendable enterprise is a noble gift of the Commercial Club of this city, which resolved, as the result of an evening's discussion, to contribute from its own membership $100,000 toward its establishment. Already the elegant building is up one story. The cavity for the corner-stone casket was prepared in the west pillar of the main entrance, on the Twelfth street front of the building, on a level with the first floor above the street. About two hundred persons,

ladies and gentlemen, witnessed the ceremony of laying the corner-stone, among them Lord Chief-Justice Coleridge, of England.

DRAUGHTSMEN will be glad to know that there is a probability that in the future they will be given a half-holiday on Saturday, as the question has been taken up and is favorably thought of by leading architects. And it is decidedly a move in the right direction. The draughtsman who labors faithfully through the week, many of them with genuine architectural ability carrying out in detail the roughly sketched and hastily-planned designs of the architect, and all laboring with their intellect as well as with their hands, should have a few hours at least once a week to get out into the sunshine, and throw off the restraint of office life. As a matter of pure recreation this should be allowed by every architect who employs a draughtsman, yet there is a more important reason. A draughtsman who carries out the details of an important construction upon the drawing-board should be given an opportunity of occasionally inspecting the work as it progresses, and of examining the labor of others, so that he can work with a better intelligence, and with a practical as well as a theoretical knowledge of the architect's plans. That a Saturday afternoon given in this way for these purposes would be valuable to the young men who are to be the future architects of the country is beyond question, and the architect not only confers a favor upon his profession in granting it, but he benefits himself as well; for whether his draughtsman uses the time given in recreation or in the further study of his work, his working hours are made more valuable, and he becomes an intelligent employé where he is too apt to be a machine, working because he has to, and only as long as his contract with his employer calls for, with no personal interest in the success of his work. Let the architects combine in this matter, and if an office starts a paper around among the architects for signatures, let it be signed by every architect, and give the draughtsmen one and all at least a half-holiday once a week. It is in these ways and upon concerted action that the elevation of the architectural profession in a considerable degree depends.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART VII.—ASSYRIA.

FOR more than two thousand years the ancient cities of Assyria on the Tigris, and the city of Babylon on the Euphrates, had lain buried in the sandy earth of half-desert provinces in Turkey—the sites only marked with much uncertainty by irregular mounds and local traditions. These mounds had long served as quarries, from which the inhabitants of the surrounding country had obtained brick for the building of modern Bagdad and Mosul. Occasionally a stone with an inscription or a bas-relief had been unearthed, only, however, to be seen by half-civilized inhabitants who placed little or no value upon them.

In December, 1842, Botta, the French consular agent at Mosul, commenced excavations in the mound of Kouyunjik, opposite Mosul. Botta soon found numerous small fragments of bas-reliefs, but nothing in a perfect state to reward his labors.

An inhabitant of Khosabad, an Arab village situated on the plateau of a mound, a little to the north, had brought to M. Botta two large bricks, with cuneiform inscriptions, which had been found near his village, and offered to procure as many as he wished. Botta sent a few men to dig at Khosabad who were so fortunate as to bring to light almost immediately the remains of a chamber with a façade covered with bas-reliefs. Botta sent an account of his discoveries to Paris on April 5, 1843, which account was the first notice to the world of the discovery of Assyrian remains. A second and more important report, of date May 2, 1843, was published which excited much interest and obtained an appropriation of funds from the French government for the continuation of the work.

The local authorities, while pretending great friendship for Botta, threw every obstacle in his way, so that for several months nothing further of importance was accomplished. In May, 1844, Botta was joined by a young French artist, Monsieur Flandin, and work was resumed. In December, 1846, the first Assyrian antiquities reached Europe; they were landed at Havre and are now in the Louvre.

An English traveler, Austin Henry Layard, already familiar with the languages, manners and customs of Eastern Europe and Western Asia, had become much interested in the discoveries of Botta. He sought the assistance of the British government to make researches in behalf of the British museum, but without success. Sir Stratford Canning, however, contributed from his private funds, and Layard reached Mosul in the latter part of 1845. Well knowing the opposition of the local authorities, he selected the mound of Nimrod, in a little frequented district some thirty miles below Mosul, for his first work, and left Mosul on a raft as if on a hunting expedition, in company with Mr. Ross, a British merchant. They were attended only by two assistants. Layard's first excavations brought to light fragments of alabaster slabs, much injured by heat, and quantities of charcoal. Evidently the palace had been destroyed by fire. As soon as it became known that Layard was at work he met with the usual difficulties from the governor of the province, who, in an underhand way, on the most foolish pretexts, stopped the work some three times, until Sir Stratford Canning obtained full authority from the Sultan for all excavations he might choose to make, with permission to ship his finds out of the country. Layard then moved his force of workmen to the south face of Kouyunjik, and soon found a rich collection of sculptures in excellent preservation. Among the most remarkable discoveries was a chamber ten feet square in the hollow of an immense wall some fifty feet thick and about fifteen feet below the top. This chamber seemed to be a cell or cistern without opening of any kind. The remarkable feature was the roof, which was an arch made of kiln-burned brick. Once on a time the Etruscans were credited with having invented the arch with radial voussoirs, but here was an example centuries older than anything we know of in Etruria. Layard also found drain-tile, used, as used today, to drain the courts that were exposed to the weather, and under all the paved floors he found a damp course of bitumen.

After shipping to England the firstfruits of his labors, Layard, to use the words of his biographer, Joseph Bonomi, took a short excursion in pursuit of health to the country of the Devil Worshipers. Who or where they were he does not tell; however, the trip proved beneficial, and early in 1847 Layard was again at work. After much difficulty a huge, human-headed, winged bull, and also a lion, were dragged to the surface and embarked down the river on rafts, and on the 24th of June, 1847, Layard himself quitted Assyria for Europe.

These were the fortunate beginnings. So much has now been done that we are able to restore to a considerable extent the architecture of Assyria, and to understand their manners and customs and much of their history.

The country was occupied by the Turanians at a very early date; then by the Semitics, who had evidently dwelt here a long time isolated from the rest of the world, when the Aryans, in their numerous emigrations, finally passed the mountains, and found a fertile valley watered by two great rivers, and peopled by a numerous race living in villages and cities, whom they finally conquered, and for a long time held the country as the ruling race until they became blended with the Semitics, and formed a new race known to history as the Assyrians and Babylonians, possessed of special characteristics: intelligent, fond of luxury, and possessing an aptitude for the building and plastic arts quite unknown to either of the Aryan or Semitic races when pure. These arts, especially after the conquest of the country by the Egyptians under Throthmes III, were developed with such rapidity, and to such a degree of excellence, that it can hardly be explained except by the existence of traces of old Turanian blood, if not among the rulers, at least among the artisans. The Egyptians held the country for some five centuries, and gave to the Assyrians many of their arts and sciences, and taught them the use of stone.

The Relation of Artists to the Public.

PAPERS READ AT THE RECEPTION OF THE CHICAGO ART GUILD, JUNE 22, 1883.

HOW shall the relation between artists and the public be defined? What is the plane of their common meeting? Are there any obvious canons of broad art criticism? These are questions daily asked, and although of vital importance, never fully answered.

Between artists and the lay public, the bond of sympathy is seldom real, still more seldom strong, and the high road to success generally lies along some course laid out and leveled down by a purely ephemeral fashion.

This artist reaps success during his life, because some fortunate chance enabled him to become the lion of the moment—"to get in the swim." That artist works with great talent and lives unknown, because, forsooth, his grammar is bad or he eats with his knife. One dies, and passing beyond the realm of fashion, is forgotten; while he whom fashion despised wears beyond the shades an immortal crown. All this is wrong, we readily acknowledge—yet how shall we rectify it? The world is busy with its own pursuits of bread-winning. It is rendered by the fierce competition and daily grind of such pursuits contemptuous of all vocations whose end is not identical with its own.

Artists on the other hand are sensitive, often unpractical, in the worldly sense, and look with lofty scorn on those whom they think are mere devotees of Mammon. Occasionally some bolder adventurer passes across the chasm from one rank to the other, becoming on the one hand an enlightened and sympathetic Art patron, or on the other, the fortunate artist whose pictures, although good, "sell." This, however, is rare, and generally speaking there is little effort on the part of either artists or the public to understand each other, each being too intent on its own point of view to see clearly that contemplated by the other. Artists learn only too quickly that the Art patron is not the Art critic, and must not be confused with him; that one is to be tempted by anything catching, and hooked by all means fair or foul, while the other is to be won over to partial criticism, or treated as the first Apollo did the Python.

This is unnecessary. Both artists and the public are to blame that such a condition of affairs exists. There have been times when full communion was held between greats artists and great patrons, memorable in all history and all art; while here, in Chicago, intense in all money getting, and fiercely practical in all aims, there are elements which should contribute to found and nourish a great and vital Art movement. When shall it begin, and how?

As artists, it concerns us little what changes must affect the attitude of the public to us; much, what new attitude we shall assume to the public.

To begin with, let us put ourselves in the public's place. The one great question to a merchant or banker about to buy a picture or build a house, or subscribe for a symphony concert, is why? What he wants is a compact compendium of Art principles—a *vade mecum* of easy reference—something he can always turn to and find whether he is about to get his money's worth, or is to be cheated. He is somewhat like a breathless countryman of ours in Rome, who, having failed to receive from Mr. Story a satisfactory answer to the question, "How much is an ile painting 23x25 inches worth," returns to the charge with the poser, "Do these Italians use good materials in their pictures?" Nor is such a man altogether to be blamed.

Consider for a moment what it means to become a well-equipped Art critic. Ruskin, Taine, Viollet-Leduc, each great and little critic writes his book. These are to be read. Histories by Ferguson, by Agincourt, Lübke; biographies by Grimm; autobiographies by Benvenuto of ever mirthful memory; lives of musical composers, and the mathematics of music, Schopenhauer theories of Wagner, all must not only be read, but digested. Laboriously must he reconcile antagonistic theories; he must correlate isolated facts; he must discover analogies and general principles. To know Raphael is not to know Claude, and to love Claude is not to love Turner; while to fully appreciate all pictorial art is not of necessity to rightly value a great public building or a symphony by Beethoven. At every point of his research, this seeker for truth must turn back and reflect—reflect with singleness of purpose, and must do for himself what no writer has ever done for him. All this is the work of years, which we cannot expect men of business, be they ever so earnest, to undertake. Ninety-nine out of a hundred will be like our friend in Rome. They will take the whole thing on trust. As a consequence, we artists lament our lot as having fallen on an evil time. Evil it is, but not of necessity. Remember, the original attitude of the public to us is not hostile—it is rather one of inquiry. We on our part do little to answer the endless "Why's" put to us—indeed cannot answer a tithe of them—and inquiry daunted by the difficulty of finding "why" from books, and the impossibility of finding "why" from us, sinks back into apathy, or the heedless following of fashion.

We, on our part, go our ways, with no thought of this indwelling reason of things. From Corot we have so much; from Daubigny so much, so much from Couture; hence, we paint. As architects, we use lintels and arches, columns and buttresses, and create successful buildings. As musicians, we accept this theory of opera, or that rendering of Schuman's Kreisleriana. But, *why* do we so? Who of us brings himself continually to book with this question? It is not to us the final question; for to us it is often to be met, by the artistic sense, with a woman's "because."

Yet, whether "why" can ever fully touch the result, it can always check the method. More than this, if we persistently ask ourselves the reason for what we do, we will have toward the public a much better and more easily comprehended position. Another respect in which we can help ourselves, as well as the public, is to learn those broad principles of Art which underlie the craft of each artist. Learning these, we gain in common *esprit* and sympathy, and each man's Art is to him more vital for the appreciation he gives the other.

Accustoming ourselves also to look for the *raison d'être* of other arts, we learn to recognize the motives of our own. Thus, ultimately, we learn just what we would like the public to know, that there are fundamental and immutable principles underlying all arts, which may be everywhere recognized, and which will everywhere constitute the elements of sound Art criticism.

THE PAINTER.

Ruskin pointed out that the duty of artists was less to show people what they habitually saw than to show them what they ought to see.

It must be this maxim which we follow in the care with which we select subjects for our pictures. Every good American, dying, goes to Paris. It is the duty of all living Americans to go abroad and see, in the consumedly American fashion, all that God and man have done for Europe. Therefore, by Ruskin's dogma, it is the duty of all artists to paint the Alps, scenes in Normandy, sunsets in Venice, and what not, so that they may show people what they ought to see.

Query — When people have seen our canvas, have they really seen the Matterhorn or the Grand Canal? Can we ever make people see things that they are not familiar with? Must it not be that, as Ruskin really said, we must show them the greater depths of things they habitually see? This was what Jeane François Millet did, what every great artist has done.

Let us then relegate to our portfolios our much loved sketches of foreign lands, made when the influence of Munich and Paris was still fresh upon us, and boldly spread our palettes with local colors. To comfort ourselves in such a resolution, let us remember that Art does not rest in the greatness of the subject, but in the greatness of the artist.

Here, dwelling among flat plains and in all pervading smoke, yet near a lake of loveliest water, we must make our canvas ring with this music, and forget the strains of Tyrolean pipes and Roman lutes.

Some day, Messieurs, by our own patient research, we will teach the Chicago people to see these indwelling sweeps of atmospheric opalescence. Then we will be true artists, with the essential flavor of the soil. Then, perhaps, some among us will spread the wings

* * * "which the Theban eagle bear,
In supreme dominion, through the azure field of air."

Meanwhile we will be helping to establish between the public and ourselves a better understanding. We will be doing service to true Art in painting what we daily see, not what we saw last year, and perhaps earning a greater largess in addition to that occasional dinner the musician has dwelt so fondly upon. Learn, *mes amis*, like the succulent oyster, to harmonize with your environment.

THE MUSICIAN.

(Under this head was read a very interesting and attractive paper which the editor deems advisable to omit).

THE DECORATOR.

The pale lavender, which was on the walls of Martha Washington's New York house, and which was soiled by the heads of those whom she called "disgusting republicans," still held sway within the memory of nearly all of us. As late as the era of our small clothes, the highest art in decoration rose no higher than this. Color had little function in the house of twenty years ago. Form, in decoration, was everything. Ingeniously painted moldings, in the most debased Renaissance, were the last touch of the decorator's brush, and were accepted by the public with the same blind trust that meets the last vagary of Tiffany.

At every stage of that remarkable revolution, or rather series of revolutions which have followed each other since then, much more can be truthfully said of the faith of the public than of the ability or studiousness of the artists. Whatever else decorators may complain of, it cannot be the public, for their attitude is one of blind confidence, the more remarkable because of the fact that we, as decorators, have done our best to shake it.


LAKE SHORE DRIVE
NORTH SIDE
PRAIRIE AVENUE
DEARBORN AVENUE
SCHILLER STREET
WALTON PLACE
STATE ST.
NEAR DIVISION ST
FRAGMENTS
OF
CHICAGO
ARCHITECTURE
SKETCHED BY
CICERO HINE

Let us remember that in Chicago, within two years, the same people who had reveled in horsehair sofas and French gray walls were disporting themselves before the wild chaos of Eastlake's reds and olives, or bowing down in mute worship before goose and rabbit friezes by Dresser. Complacent, they are our friends, the Philistines, and generally victims of the latest mode, as explained by the upholsterer's clerk.

This is to us decorators a source of profound sorrow; we no sooner begin to learn the true inwardness of Talbert than Talbert is obsolescent. We scarcely master Morris before Tiffany is the thing. In short, the cyclonic sweep of public fashion makes us the conventional rolling stones.

I do not suppose the artist lives who approves of this endless scurrying to and fro of fashion, yet to my mind it is evident that artists must do something to stop it, or the endless running after it which our bread and butter quest compels will kill us. The story of Canute and the tide occurs at once to us. True enough it is that we won't succeed in fixing popular taste by talking to it. Let us see if there is not beneath this ever-shifting tide of fashion some good anchorage which we may trust.

In the first place, we must remember that but a small percentage of the public view the matter in any sense as experts. That part of the decorator's art which appeals to be trained, educated eyes must always fail of result to the great mass of people. Only art connoisseurs can distinguish between a scroll of François Premier and one of Louis Quinze.

It is only the cruder elements of form in decorative designs that any but artists discriminate, and it would be safe to say that in general these cruder forms characterize any period of rapidly shifting fashion like our own.

In contradistinction to this obtuseness to form there is a relative sensitiveness to color. I do not mean that color is generally understood in its refinements, but nearly every educated person has some well defined tastes in the matter—tastes often accompanied by more or less deeply rooted emotional effects. Of course we concede this at once of women, but it is also true of men. The tendency of people to value color rather than form seems to me to be of great value to us as decorators. It gives us a clew to certain fundamental facts on which we can build more permanently, for fashion can never shift rapidly when people begin to realize an outward expression of their deeper feelings. In this matter, decorators have generally worked with much greater stress upon form than color, color becoming too often a matter of pigment and too seldom a matter of quality. The public, on the contrary, which must necessarily be obtuse to form, never value colors as pigments, but always as qualities.

It is this which is the key to the phenomenal success of several decorators in the East. Their work is an admirable expression of the natural tendency of the public taste. It is often very simple, and even ungrammatical, in form, but it brings into full value the qualities, that is the lights and shades, of color. In striving for these qualities, these men have created new materials of the utmost value from one point of view, and valueless from another,—materials which become as absurd when welded into set and definite forms as a bit of sunset would be, leaded into squares and circles. As decorators, we can do nothing which will help us more than to accept this tendency of the public, for in it we are clearly shown the path to tread, and as has happened a thousand times before, the great success lies where that path leads. As Goethe says, "Fill your mind and heart, however large, with the sentiments of your age, and art will follow."

THE ARCHITECT.

Architecture has been practiced in all ages; the plane where the architect and his client meet is the dead level of dollars and cents. In the earliest times, you will find the flat-headed Lake-dweller haggling with his builder in the mad effort to build for a hundred fish a house worth two hundred. Now, the chief woes of the architect are identical with those of his prehistoric brother. Not even in music (our "Musician" to the contrary) is there such a manifestation of the trick the public has of measuring Art by a golden rule as in house designing. This being accepted as the *status quo*, the problem is how far architecture as an art can defer to it. In the first place, it cannot accomplish anything by imitating good materials with mean ones, as galvanized iron painted to look like stone, for this is to commit artistic hari-kari.

In the second place, it cannot practice deceit toward the client in leading him to begin his building under a false idea of its cost, for this is blank dishonesty, and art is in the main honest. The only means immediately at hand for the production of satisfactory results must be within the region of legitimate expression by given materials of the structure inherent in them, and this implies that the architect shall repress in his client any tendency to that spirit of display which leads to the confusion of materials above mentioned.

It will be found that there are always two methods of arriving at an architectural result, one cheaper than the other. The methods are almost equally effective, and equally good. Indeed, it generally happens that the cheaper method is artistically better, for the difference in moneyed cost between the two is precisely measured by the brainwork of the designer. Money, pure and simple, will always buy the similitude of Art, but good art is apt to be cheap art, broadly speaking, because the brain and ingenuity put into a design take the place of what with less thought would be expressed in dollars and cents.

Thus it appears that the meanness in the public which we lament is not an unmixed evil, but, if we are true philosophers, is but an instrument which should compel us to lift our work into the region of higher art by making it always pregnant with our own thought.

Iron in Architecture.

In a series of lectures on the decorative treatment of metal in architecture, by Mr. George H. Birch, published in the London *Journal of the Society of Arts*, we find some statements with regard to the uses of forged iron as an architectural adornment which throw out some practical hints. American architects and builders might appropriate to some advantage, since the modern tendency is toward the employment of such materials as are of a durable character and capable at the same time of being modified into forms of symmetry and beauty while maintaining their strength and immutability. After alluding to the universal use of iron as an architectural adornment throughout continental Europe during the middle ages, some of the most notable specimens of the blacksmith's art in England during that period are referred to; a knocker on the door of the cathedral at Durham, resembling the head of a lion, from whose mouth depends the hand-ring—a wonderfully animated and vigorous piece of workmanship; hinges on a door leading into St. George's chapel at Windsor Castle, which are suppressed and the door covered with a series of wrought-iron pointed ovals, the centers of which and the spaces between are filled with a succession of scrolls with foliated ends and sprigs; the ironwork which protects the tomb of Elanor of Castile in Westminster Abbey, all showing the power of design and adaptability of the material in the hands of the English blacksmiths of the 13th century. Notable instances of other ironwork of the 15th, 16th and 17th centuries, such as railings, bridges, etc., are cited, showing equal skill and art. The German school seems to have been especially happy in the manner in which this metal was worked into architectural designs. Nowhere does it appear to have been an afterthought, but to have been especially designed for the place it was to occupy, whether a railing to protect a fountain or the grilles of a cathedral or chapel. In Nuremberg and Augsberg, says Mr. Birch, one's steps are continually arrested by the exceeding beauty of the wrought-iron work of the 16th, 17th and 18th centuries. Sometimes it is a bracket projecting from a wall, at other times a grille over a fanlight or in a balcony, or the hand-rail of an external turret staircase, or the metal canopy to a well; and then the manner in which some of it blossomed into the most lovely flowers, in which the petals and stamens were all most delicately worked, shows how thoroughly these old craftsmen entered into the spirit of their work. The German artists of those centuries particularly affected a very intricate Runic knot pattern, in which the lines threaded through and through one another, imparting additional strength. The Spanish blacksmiths of the middle ages also left numerous specimens which remain of their genius and craft, in old pulpits and *rejeros*, in some of the latter, wherein the foliage is superbly wrought out from the back and the finials and flowers are almost reproductions from nature. In Italy the art of the smiths was in no way behindhand, as is evinced by the remaining balconies, grilles, torch-holders, lanterns and cressets. In France but little remains of the Renaissance period of wrought-iron work, but what perfection was attained is attested by what is left, such as the superb gates in the vestibule of the Galérie d'Apollon.

Mr. Birch's conclusion is: "The judicious use of iron grilles or railings, either surrounding or partly protecting large public buildings, is in itself undoubtedly a great help to the architecture, and more especially when such an enclosure or railing partakes somewhat of the character of the building it protects. In London we have one or two examples where the iron railings apart from their intrinsic beauty of design, do lend themselves to enhance the architectural design. For example: the handsome, massive railing round St. Paul's cathedral; the small dwarf railing in the Strand front of Somerset House; in a more limited form and among modern buildings, the new Law Courts, with its various grilles, gates and hinges; and the large block of red brick buildings at the corner of Carey street and Serle street, called New Court-chambers. In both of these buildings, and in many others of recent date, this valuable adjunct has been carefully considered and studied, more especially by the talented designers to whom we are indebted for these additions to the architectural beauties of our metropolis, Mr. Alfred Waterhouse, R.A., and the late George Edmund Street, R.A." In the course of his third lecture Mr. Birch makes a criticism on the prevailing use of iron in building, which, although it may not be considered exactly germain to the subject treated of above, is so truthful, and as applicable in America as England, that we cannot refrain from quoting it. He remarks: "It is said 'we learn from experience,' but experience, time after time, seems to be set on one side when monetary considerations have to be considered. Although fire after fire has taken place in the metropolis, and taught us many a bitter lesson, we still go on building huge piles, stories high, resting on a few cast-iron girders and columns on the ground floor, or immense frontages of stone and brick, laden with columns and friezes and huge cornices, carried, perhaps, by a single girder from wall to wall, and we are told in these days space is valuable. No matter if it does cost a few firemen's lives in the course of the year, a generous public will make it up to their widows and families, and there is no loss; the stock was last year's, and the insurance covers everything, and the business is carried on temporarily until new premises are built. We have building acts enacted to lay down authoritatively the thickness of walls and the depth of the footings, but none to prevent the misuse of metal girders and slender cast-iron columns. A fire has but to

break out and lap those supports in its fiery embrace and down comes the superstructure, and the result is utter ruin and loss of life. When Paris was enveloped in flames, kindled by the Commune, and many of its finest buildings reduced to blackened and empty shells, one could trace the havoc caused by the fall of girders, in many cases worse than the ravages of the fire itself."

Architectural and Building Notes.

J. F. Doerr, one of our ambitious young architects, has several buildings well under way.

Architect J. Rodetz has designed a new house for Mr. F. W. Jones, to be built at Englewood.

Fifty hands are at work at the Oatmanville quarry, in Texas, getting out the stone for the new capitol.

Architect W. A. Furber is building a handsome residence for F. A. Thomas on Walton place, east of Cass street.

Architect Hallberg is building a house for Mr. C. B. Holmes, at the corner of Prairie avenue and Thirtieth street.

J. H. Conrad is having a residence built for himself on Oakwoods boulevard, near the Wilson houses, to cost $20,000.

The Anderson Pressed Brick Company are shipping their pressed brick to Grand Rapids, Mich., for a residence by Geo. W. Gay.

Architect L. D. Cleveland has made drawings for two flat-buildings for Mr. Thomas Kirkwood, at Nos. 62 and 64 East Chicago avenue.

Architects Dixon & Townsend have completed plans for two fine dwelling-houses, to be erected for Mr. C. D. Seeberger, on Michigan avenue, near Forty-third street.

The floral conservatory at the Rosehill cemetery is nearing completion. The walls are of Anderson pressed brick, and finely contrast with the stone of the adjoining building.

The Lowry wagon factory at Augusta, Ga., is to be enlarged by the addition of another building 50 by 170 feet, to be supplied with woodworking and blacksmithing machinery.

A $70,000 building, in which there will be a theater, is to be built at Ocala, Fla., by Mr. J. E. Harris, the great orange man. A $50,000 hotel is in course of construction at the same place.

One of the most remarkable sights in Chicago is to see the Wabash avenue front of the great Palmer House "decorated" with three unsightly, partially rotten, and ungainly wooden ladders.

R. T. Crane, of Crane Bros. Mfg. Co., is building seventeen houses for his employés, on May street and Chicago avenue. The hardware is furnished by Bullard, Gormley & Blackburn.

Architect C. L. Stiles is erecting a fine store and apartment building in Elgin for Hunter & Hawkins, of that city. The fronts are of Anderson brick with trimmings of light stone.

To facilitate his work in the South side, J. J. Wade, plumber and sanitary engineer, has opened an office and show room at 137 Lake street. His West side quarters will be continued as heretofore.

Architect P. B. Wight is about finishing for himself four two-story houses with French roofs, at the corner of Prairie avenue and Fortieth street. They are single dwellings and will be nicely finished.

Architect Charnley is constructing for Mr. Gore, of Chapin & Gore, a fine residence at Forty-seventh and State streets. It will be built of Anderson pressed brick, and the contractors are Wm. Price & Son.

Architect J. C. Lane has completed plans for a block of stores on West Madison street, near Hoyne avenue, for Mr. Wood. The structure will have a front of Anderson brick, and will be divided up into flats above the stores.

We are sorry to note that it is understood the improvement which Mr. L. Z. Leiter is making on his lot at the southeast corner of State and Van Buren streets will not be in keeping with the other structures on that street. It will be built on the economy plan.

Architects Edbrooke & Burnham are building a fine residence for Mr. Bushnell at 175 and 177 Warren avenue. The fronts are of Anderson pressed brick. Also for G. W. Clinton, two houses on Warren avenue and Leavitt street, of Anderson pressed brick.

It has been decided to construct the Quincy street front of the new Royal Insurance Building above the first story of Anderson brick, with stone and terra-cotta trimmings. The Jackson street front will be of rose-colored granite furnished by John Davidson & Sons.

A new hotel under construction at St. Augustine, Fla., will be L shaped, 250 feet long by 240 deep, five stories high and contain 325 rooms besides dining-rooms, etc. It will have 500 feet in promenade on the top; 2,000,000 feet of lumber will be consumed in its construction.

Architect Asa Lyon, of Evanston, is constructing for Dr. Clapp a three-story flat-building. The basement walls are of "grout," or gravel mixed with cement, the walls are of brick, and the building is arranged for stores below and apartments above. John R. McLean, Jr., is the general contractor.

Architect W. L. Carroll is building a residence for Mr. J. J. Schock on West Madison street, near Garfield Park. It will be 24 by 50 feet, two stories, cellar and attic, and will have a pressed-brick front. Mr. Schock intends occupying the house himself, and will pay special attention to the interior finish.

Architect W. L. B. Jenney is planning a villa and complete accessories, including residence, stables, poultry houses, ice-house, fruit house, etc., for F. M. Sanger, to be built in Indian Territory. All the furniture and manufactured material will be furnished from Chicago. The villa will be a model of its kind. It cost is not as yet estimated.

An Austin, Tex., correspondent writes to the Chattanooga *Tradesman:* "Never, in the history of this city, has the demand for lumber been so great. There are over 150 frame houses, most of them two stories, in course of erection, averaging from $3,000 to $10,000 apiece. This does not include improvements made in other property."

T. C. Goudie, the contractor, has removed his office and shop from 965 West Lake to 907 West Lake. Mr. Goudie belongs to the younger order of architects who are making reputations among leading architects by skillful and conscientious fulfilling of contracts. They deserve the fullest recognition, for they are the builders for the next generation.

Mr. Abner Crossman, until recently with J. B. Sullivan & Bros., is now doing business in the line of interior decoration for himself, his office and studio being at 209 Wabash avenue. Among the recent works by this artist is the decorative painting of the M. D. Wells house on Prairie avenue, and also the residence of Mrs. Julia F. Porter, on Fullerton avenue.

M. Benner, of fire-escape and standpipe fame, is obliged by increasing demand for ladders, to build a new factory. Architects Treat & Foltz have one under construction for him, four stories high, 55 by 150 feet, located on Jefferson street, one hundred feet from Harrison. Recent fires and many narrow escapes have made this matter of escapes a serious one, and they are being generally placed on high buildings.

A Chicago architect (whose wish that such fame as he may acquire may be by his creations rather than by his name appearing in print, which desire we respect) has just commenced, at Kankakee, Ill., an extensive opera house for Mr. Emery Cobb, of that city. The building will be substantially constructed of St. Louis Hydraulic pressed brick, of which 80,000 are contracted for, and will cost in the neighborhood of $100,000.

Architects Jaffray & Scott have prepared plans for a residence for P. C. Hanford, to be built on Calumet avenue near Twentieth street. The walls will be built of Connecticut brown stone, and the structure when completed, will cost about $40,000. In design, the exterior is extremely tasteful, and the owner's wish is to secure a thoroughly elegant and harmonious interior, all the details of which have not as yet been fully decided upon. The foundations have been commenced.

The contracts for work on the new depot for the Western Indiana railway, of which Cyrus L. W. Eidlitz is the architect, were awarded the following parties: Steam heating, Fred Lutor & Co.; masonry and plastering Jos. Downey; carpenter and woodwork, E. Hudson; ironwork, A. Streeter; roofing, Knisely & Miller; painting, J. B. Sullivan & Bro.; terra-cotta, Perth Amboy Terra-cotta Company. Ground has been broken, and the building is now fairly under way.

The assessors of Cincinnati, in accordance with the law, have returned to the county auditor the number of buildings, with value and description, that have been erected in each ward of that city during the taxable year ending the second Monday in April. The returns for 1883 show a total number to be 748. The most costly buildings are Russel & Morgan's printing house, $40,000; Grand Central Depot, $66,000; Palace Hotel, $73,000, and Ortiz Block, $82,000.

The use of stucco is quite general in the interior decoration of opera houses. Those in process of construction at Cincinnati (Heuck's), that for Hon. C. T. Doxey, at Anderson, Ind., and at Sedalia, Mo., for Hon. H. W. Wood, are being furnished by Brartolomei & Co., of Chicago, who are specialists in this line of decoration. These opera houses, and many recently completed, are illuminated by A. C. Hickey's sun burner device, which has not been equaled in the line of auditorium lighting.

The popularity of iron as a roofing material has been materially increased since the introduction of iron shingles by H. A. Allyn & Co., of Chicago. The extent of their trade is indicated by the placing of this material last week in the extreme northern and southern states, the roofing of an opera house at Duluth, Minn., and a courthouse at Seguine, Guadalupe county, Tex., while among corporations the Texas and Rio Grande railway have adopted it exclusively as a roofing material.

The Hallowell Granite Company, who are supplying the granite to the Board of Trade, the Pullman and Councilman office buildings, and other structures of lesser importance, as well as doing a large business in monumental granite, have experienced considerable annoyance, because of the inability of the railroads to transport the stone. That their quarries are amply able to furnish all the stone Chicago and the West can call for, is testified by the architects in charge of these buildings and the Board of Trade committee.

A new catalogue is just issued by Thos. Kelly & Bros., the plumbing supply firm, in which we are pleased to see some excellent testimonials by leading architects, one of the most prominent stating that in personal use he had tried two of different make, and had replaced them by one furnished by this firm. These testimonials are valuable, because they are given by architects of standing, whose opinions are not given unmerited. A full complement of this firm's standard self-acting closets have been furnished the new opera house at St. Paul.

A system of gas-lighting by electricity which has so many practical advantages as to argue strongly for its adoption in every well regulated house, is that introduced by the Northwestern Electric Gas-Lighting Company of Chicago. By a perfect yet simple arrangement of electric wires, run by a battery of safe and simple composition, every jet can be lighted; the opening of doors or windows will light the room and ring alarm bells, and, in fact, a whole house can be lit by the simple pressure of a button, placed, perhaps, under the parlor mantel.

Architects Bauer & Hill have completed plans and let contracts for a residence for Mr. Charles Halla, to be erected on La Salle, just south of North avenue. It will be three stories and basement high, and will be first-class in every particular, special attention having been paid to drainage and ventilation. It will be 25 by 58 feet in size, and will have a semi-Gothic front of the best quality of pressed brick, with trimmings of Connecticut brown stone, and plate-glass windows. The windows at the platforms of the staircases will be of colored cathedral glass. The house costs $12,000.

Architect Longhurst is constructing for Mr. Harry Byrne, on Wabash avenue, near Thirty-sixth street, three two-story and basement houses, that will compare favorably with any of the same size on that thoroughfare. The designs of the front will be unique and attractive. The basement will be of rock-faced green stone laid irregularly, and the remaining portion will be of Anderson pressed brick with marble trimmings, and the whole will be surmounted by a fancy cornice. The structure will soon be under roof and will be completed as early as possible.

The Z. S. Holbrook block, at Evanston, planned by architects Burnham & Root, is just completed, and is a model building. The work was mainly done by Evanston contractors, and as it is acknowledged that there are none more competent in the profession than those of that town, the work will of necessity bear favorable comparison with that of our city contractors. J. H. Kenney was the carpentry contractor. Mr. Joseph Hobbs, an old resident of Evanston, but an English educated painter, executed the painting, glazing, and decorations, and the plumbing and gasfitting was placed by McDougal Bros.

Architects Treat & Foltz are completing a residence for Mr. James A. Hunt, on the north side of Delaware place, west of State street, and have also drawn plans for an elaborate home for ex-Mayor Mason on the north side of the same thoroughfare west of Dearborn avenue. The same firm has drawn plans for four double houses for the Presbyterian Seminary people that will be erected in the vicinity of the seminary next spring; also have under construction four-story factory building 50x150 feet, for M. Benner, corner Jefferson and Harrison streets, to be used in the manufacture of fire-escapes.

The terra-cotta industry of the West has a new acquisition in the establishing in Chicago of the Lake View Terra-cotta and Brick Co., the officers being Paul Rauhut, president; John Drefike, vice-president; Otto Peltzer, secretary, and Robert Berger, treasurer. The plant, corner of Laflin and West Fifteenth streets, occupied by the Northwestern Terra-cotta Works previous to their removal to their new works, has been secured by the Lake View company, who will at once begin the work of remodeling with the view of having their product in the market for the coming building season. The central office of the company is at room 83, Republic Life building.

Architect Wm. Thomas is constructing for Messrs. Keeney & Hosmer a block of sixteen apartment-houses on Wabash avenue, between Twenty-fourth and Twenty-fifth streets, having a frontage of 345 by 70 feet, the cost of which will be $140,000, will be erected at once. There will be twin houses on either corner, four other designs in the center, the others being of a different style of architecture. The corner houses will be of Indiana pressed brick, with limestone trimmings. The block will be three stories and basement, and each floor will contain a parlor, dining-room, kitchen, bathroom and three chambers; each building will have front and back stairways, elevators, ash-chutes, etc.

Illustrative of how generally stained glass is introduced in the construction of buildings, especially private residences, we quote some of the recent orders secured by Messrs. Healy & Millet, the interior decorators, beside furnishing stained glass to the German Lutheran church, Kenosha, Wis., and the Evangelist church, Charlotte, Mich., and decorating the residences of Messrs. Chambers and Raymond, Chicago, they are furnishing windows, some of them exceptionally handsome in design and execution, for the residences of Messrs. Poole, Vensley, Sheldon, Hull, of Chicago; Fairchild, of Mt. Vernon, Mich.; Taylor, of Lafayette, Mich., and other residences both in the city and in progressive Western towns.

Architect Boyington is rapidly pushing the work upon the Board of Trade and the Royal Insurance Company's building. In the former considerable delay has been experienced in the past few weeks because of the railroads' inability to transport the granite in sufficient quantities. In the latter the contract for the masonry is let to C. & A. Price, that for granite, which will be a dark rose color, to John Davidson & Sons, and the contract for the ironwork, of which there will be a large quantity, to the Union Foundry and Pullman Car-wheel Works. Nothing farther has transpired in regard to the Atlanta, Ga., hotel, except that the plans are nearing completion, and as soon as ready will be submitted to Mr. Kimball.

Architects Wheelock & Clay have let the contracts for the Open Board of Trade. Also have furnished plans and specifications and the contracts have been let for the erection of eight houses on Lake avenue and Oakwood boulevard for W. G. Wilson, president of the Wilson Sewing Machine Company, at an aggregate cost of $90,000. One of them is to be occupied by Mr. Wilson. Five front on Lake avenue and three on Oakwood boulevard. They are to be green-stone fronts; also plans and specifications for a $5,000 cottage in Kenwood for William Reynolds; also for a frame residence for W. E. Hale on Forty-third street, near Drexel boulevard; also a block of eight houses for W. L. Wilcox on North avenue, and a house on Drexel boulevard for J. H. Conrad.

Architect Addison has completed plans for a fine flat-building for Mr. L. P. Hansen, at Nos. 49 and 51 Rush street, to cost about $30,000. It will be 50 by 84 feet in size, and three stories and cellar in height. The front will be of Bedford stone, with a projecting bay at either side extending from the basement to the top and terminating in domes. The entrance will be in the center and will be quite elaborate. Above this and extending between the projecting bays, will be a portico of unique design. The windows in front will all be of plate-glass. The interior will be divided into six apartments of seven rooms each, and will be finished in first-class shape. The entrance, vestibule, and hall will be finished in paneled oak, and the rooms in white wood, with white oiled finish.

It is a pleasure, always, to note the increasing business of a manufacturer whose success is known to be well deserved. No house in the line in the West have executed as much fine brass and nickel-plating for architectural purposes as that of L. S. Baldwin & Co. In an experience of four years spent where the building of western opera houses, theaters, etc., come under special observation, has shown that there are few firms besides this who have furnished the brass and silver-plated work, and none more meritorious in workmanship. The firm have recently doubled their factory facilities, and the latest work is the furnishing of the nickel-plated railings, etc., for Heuck's opera house in Cincinnati, and over a thousand dollars' worth of polished bronze railings, etc., to the new opera house to be opened in St. Paul on the 15th inst.

Architect Gregory Vigeant has drawn plans and let contracts for a building for Mr. D. O'Callaghan, at the corner of Indiana and Lincoln streets. The structure will be 49 by 93 feet in size and three stories in height. The first floor will be divided into two stores, and in the second story there will be four flats of six rooms each. The entire upper floor will be arranged for a public hall, with platform and appropriate anti-rooms. The front will be of pressed brick with stone trimmings, and when finished will cost $18,000. Also plans for a dwelling for Mrs. Julia De Creeb on Forest avenue, near Thirty-seventh street. It will be 24 by 50 feet in size, and two stories and cellar in height, with a front of Anderson pressed brick. Complete, the structure will cost $5,000. Also a Presbyterian church at Valparaiso, Ind., to cost $15,000.

Architect Wadskier has about perfected plans for one of the most important improvements that has been made in the comparatively new wholesale district, bounded by La Salle, Monroe and Van Buren streets and the river, since the Farwell block was erected. The improvement is to be for Mr. C. M. Henderson, of the wholesale boot and shoe firm of C. M. Henderson & Co., and it is to be made upon the lot at the northeast corner of Market and Adams streets. This lot, which is now covered by a one-story brick structure, owned and occupied by H. H. Shufeldt & Co., distillers, as a warehouse, is about 100 by 200 feet in size, with the largest frontage on Adams street. The lot was leased several years ago by the distilling firm, and the lease will expire soon. When it does, the one-story structure will be removed, and a building will be erected after Architect Wadskier's plans. These contemplate a structure of a most substantial character, six stories in height, with walls of pressed brick, that shall compare favorably with the best in the vicinity.

Architects Burnham & Root are pushing forward the plans for a hotel to be built for the Atchison, Topeka & Santa Fé Railway Company, at Guinas, Mexico. It will be located on the Gulf and will be used by northern people. It will be a typical tropical hotel, thoroughly Moorish in design, with wide Moorish porticos and large interior court. The entire construction will be of concrete. The walls will average two and one-half feet in thickness. The roof and floors will also be of concrete, the design being to make the hotel absolutely insect-proof and cool. The verandas will be twenty feet wide and extend entirely around the hotel. These will be of beton or cement around a construction of iron. It is expected that the hotel will be ready for visitors late in the winter. These architects are also letting contracts for a residence for A. A. Sprague on Prairie avenue and Twenty-sixth street. It will be three stories, 45 by 75 feet, of St. Louis hydraulic pressed brick. The basement and the trimmings of windows, cornice, gable, etc., of Connecticut brown stone. Also a residence for J. W. Brooks, Jr., on State street, near Schiller.

What are conceded to be the finest appointed mercantile offices west of New York are those just completed in the Champion Reaper Company's building built by architects Jaffray & Scott. These offices occupy two floors in the front part of the warehouse proper. The total space occupied is about 60x80 feet. A space of 20 feet square is occupied by an immense vault and the stairway leading to the upper tier of offices. This stairway is open, and like the general woodwork, is of red-oak. The main office is 40 x 60, and divided from this and also from each other by partitions composed almost entirely of plate-glass, are four offices about occupying an equally divided space, 18 x 60. The ceilings are frescoed in colors harmonizing with a heavy, solid, polished red-oak cornice and stained glass in quiet shades, give a softening effect. The smaller offices are elegantly fitted with grates and mantels, Turkish rugs are on the polished red-oak floors, and above the mantels bronze panels add effectiveness to the general interior, in which one is apt to forget that this is an office devoted to the demands of trade, and not a costly private apartment. In harmony with the general tone and color is the plain, gold-bronze hardware, all of which was made expressly for these offices by Messrs. Bullard, Gormley & Blackburn, whose enterprise and facilities of manufacture secured to this office elegant egg-shaped outside door-knobs, an escutcheon to the same 16 inches long, while each door is supplied with handsome finger-plates, plain bronze double-acting spring hinges. As a whole, this office in its arrangement and light-colored decoration, with the view of securing perfect light, is a model in office construction, and reflects general credit upon architect and owner.

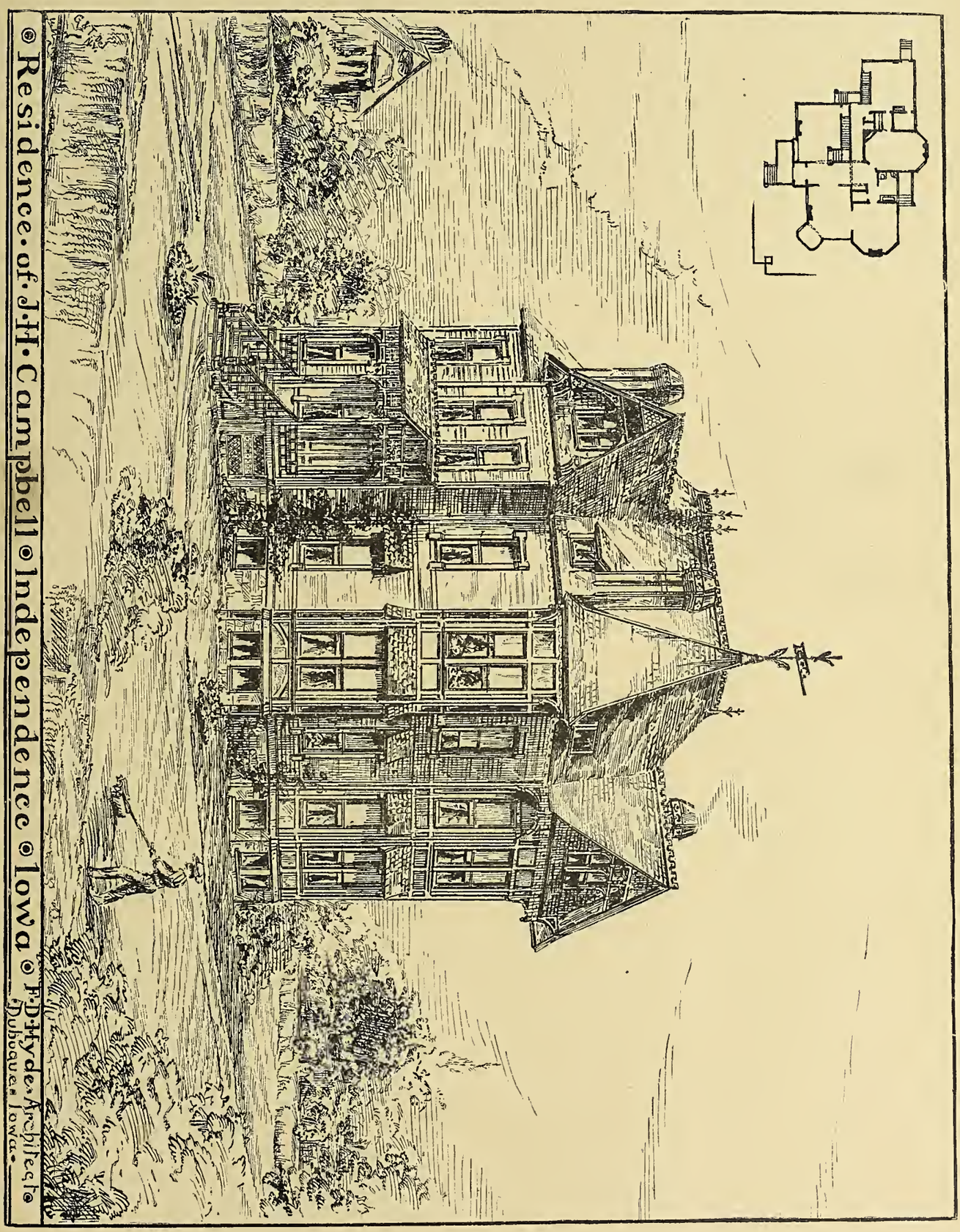
Our Illustrations.

Page 125, Hotel-Dieu of Paris. Interior perspective view from the entrance side. From *Celebrated City Monuments* by F. Narjoux.

Page 119, Fragments of Chicago architecture, sketched by Cicero Hine.

Page 123, Residence of J. H. Campbell, Esq., Independence, Iowa, F. D. Hyde, architect, Dubuque, Iowa. Built 1882. Cost about $14,000. The first story is finished in hard woods. The second story finished in yellow pine finished the natural color. The building is heated by low-pressure steam apparatus.

The ordinary way to make stained glass windows is to put pieces of glass, which are made of various colors all the way through the glass, together with lead. When it is necessary to obtain greater delicacy of effect, these can be got by simple leading; brown color is lined and crossed, hatched over those portions of the design which are to be shaded, and this brown color is burned only on the surface at a high heat. No other color is used in paint except brown; the color of the window is made in the different pieces of glass.



Residence of J. H. Campbell, Independence, Iowa. F. D. Hyde, Architect, Dubuque, Iowa.

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PHOTOGRAPHIC VIEWS—A COLLECTION OF VIEWS TAKEN AT PULLMAN, ILL., AND A SET COMPOSED OF PHOTOGRAPHS OF THE MORE ATTRACTIVE RESIDENCES OF CHICAGO. Published by J. W. TAYLOR, Chicago. Price $12 per set of twenty-eight views.

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SPECIFICATIONS FOR FRAME HOUSES RANGING IN COST FROM $2,000 TO $20,000 By WILLIAM T. HALLETT, Architect, New York. WM. T. COMSTOCK, publisher. Price 50 cents in paper and $1 in cloth.

This valuable treatise has reached its fourth edition, which speaks for its appreciation of the special study the author has given the subject, supported by his experience in general practice, to furnish a form for general use. We see no good reasons why architects might not adopt some such general form of specifications as a matter of saving time and securing a desirable uniformity. The advantage of ease of reading on the part of the mechanic who executes the work is one of no small consideration. The form presented in the work is one that has been so generally used it needs no further description than to say it is very systematically arranged, taking up such branch of work by itself and completing it under its different headings. There are abundant blanks for any needed interlineations. Undoubtedly so useful a book will run into other editions.

THE ART INTERCHANGE, Fortnightly paper, published by WILLIAM WHITLOCK, 140 Nassau street, New York. Price $3 per year.

The September number of this journal is on our table. For one of its supplements it has an outline study in color of a beautiful female head, by Sir Frederick Leighton, which is well worth framing. There is another supplement, full working size, of a handsome embroidery pattern with d rned background. Two excellent designs for plaques are given; one shows a beautiful girl in Rubens costume, the other an equally attractive girl in a Vandyck costume. Good examples of Persian and Turkish embroideries, illustrate a well written article on these styles of needlework. In "Notes and Queries" are given replies to a great variety of questions. Among other answers are some relating to Claude Lorraine glasses, suggestion for a table cover, wall and ceiling coverings, draperies for parlor windows, colored glass for church windows, scheme of color for painting a donkey's head in oils, mineral colors for complexions, and mottoes for book-case curtains. An entertaining article on the "Nuremberg Museum" is illustrated with drawings of curiosities to be found at that institution. The book and art news departments of the paper are full and interesting.

PRICED CATALOGUE OF SURVEYING AND MATHEMATICAL INSTRUMENTS, AND DRAWING MATERIALS FOR ENGINEERS, ARCHITECTS, SURVEYORS, DRAUGHTSMEN, RAILROAD CONSTRUCTION, AND FOR SCIENTIFIC AND TECHNICAL SCHOOLS. F. W. DEVOE & CO., Fulton and Williams streets, New York, and COFFIN, DEVOE & CO., 170 Randolph street, Chicago, Publishers.

The importing and manufacturing firm of F. W. Devoe & Co., have just issued an elegantly bound and profusely illustrated catalogue of architectural, mathematical and surveying instruments, made necessary by an increasing demand for these goods, of their manufacture and importation. The volume is bound in cloth, with artistically designed covers and a fine steel-engraved frontispiece representing the three departments to which the pages are devoted, is a fine sample of the work executed by the American Bank Note Engraving Company, of New York. The matter of the volume is distributed through 264 pages, each department systematically arranged and indexed, treating of everything that a draughtsman or engineer may require in his work. The T-squares, triangles, drawing-boards, manufactured by the house, are shown, their factory including a special department for this class of work. A complete assortment of instruments for lithography, and a patent ruling and lining machine is illustrated, which has the advantage of not necessitating a count being kept while ruling equidistant parallel lines. Swiss drawing instruments of improved design are shown, also transits, theodolites and levels, diamond pointed pens, etc., while under a special head of sundries the catalogue is unusually complete. A special feature is made of mechanical and architectural models and studies, alphabets and books of architecture, engineering, etc. The book is certainly a credit to a house who have already made a national reputation in all branches of house-paints, artists' colors, etc., and will be a valuable addition to the working library of all architects, engineers and artists, who may be so fortunate as to secure a copy.

THE CURRENT, a weekly literary journal, will be issued from Chicago on next Christmas day by Edgar L. Wakeman. The founding of this journal has been in contemplation for the past ten years, and Mr. Wakeman has been making active preparation for its publication, including a visit to Europe two years ago, at which time full arrangements with authors for contributions were made and European offices established. Among the enrolled writers are about eighty of the most eminent authors and *literati* of the time in both continents including such names as the following: The Rev. Dr. Joseph Parker, Alphonse Daudet, Robert Collyer, Emile Zola, Dr. De Griez von Ronse, Henrik Ibsen, William Henry Smith, Lucy H. Hooper, Joaquin Miller, Henry Watterson, William Young, Charles Loring Brace, Paul H. Hayne, John Ruskin, L. Alma Tadema, Hjalmer Hjorth Boyeson, Alvin P. Hovey, John Habberton, Dr. Edouard Lasker, Ignatius Donnelly, Xavier de Montepin, William F. Vilas, Bjornsterne Bjornson, George W. Cable, Edouard Remenyi, Edouard Hanslick, William Moseley Hall, Carl Fr. Mayer, Tony Revillon, Carlotta Perry, the Rev. E. P. Roe, Canon Farrar, Dr. Paul Lindau, James Walter, John Burroughs, M. Georges Clemenceau, William F. Poole, Prof. R. S. Anderson, Lionel Tennyson, Lady Lindsay, Austin Dobson, Laboulaye (unpublished MSS.), etc.

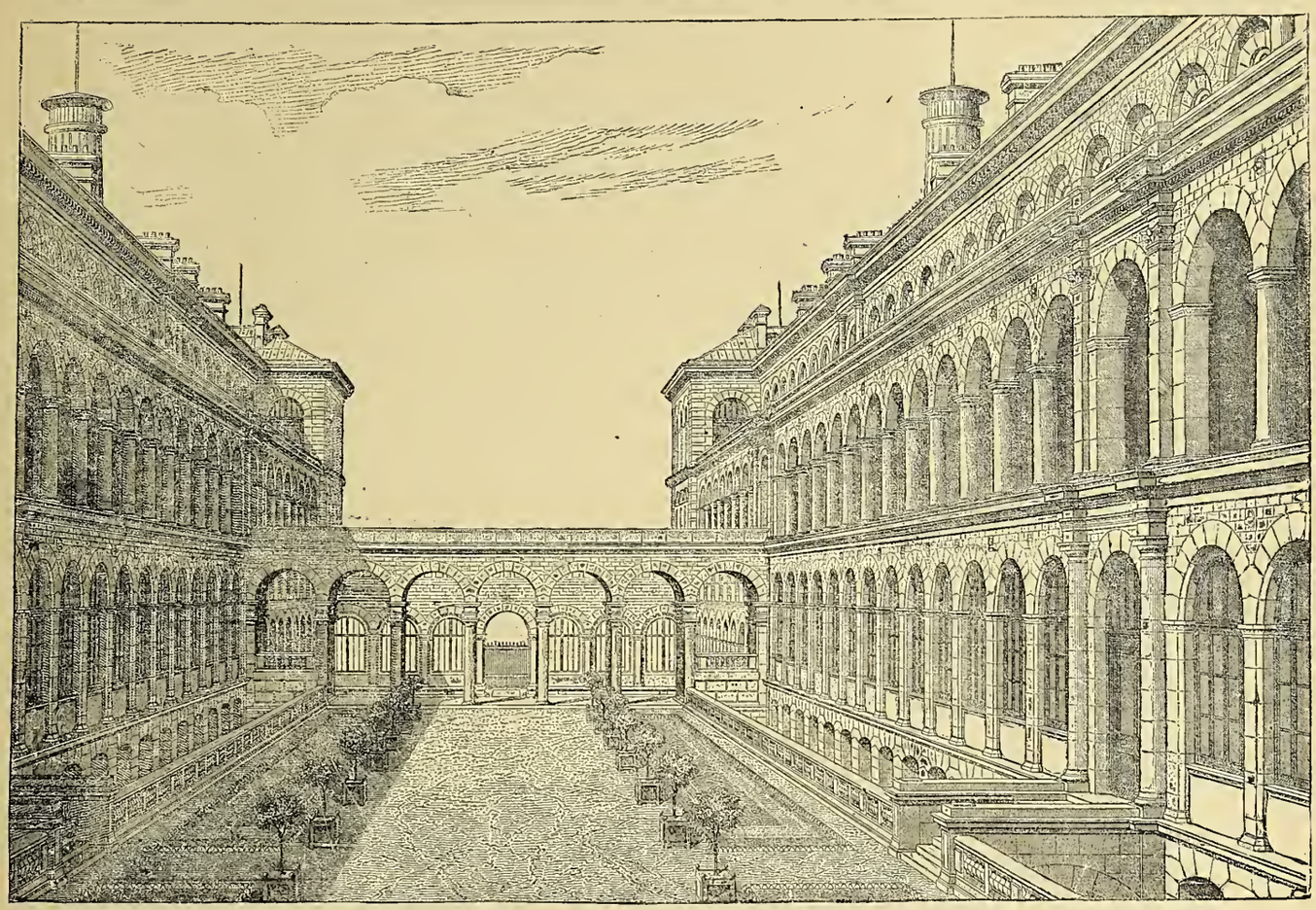
In its prospectus the CURRENT promises that there will appear in each issue a greater variety and a higher grade of general literature of a clean, noble, fascinating and elevating character than is now given in any periodical extant. The editorial staff, which will be announced December 1 next, has been for considerable time under engagement, and is of exceptional ability and strength, and will discuss all matters of human interest, including critiques upon the current events in science, art, music, the drama and all the higher professions, receiving by cable from Europe as frequently as the importance of the matter may demand.

Edgar L. Wakeman, Esq., the proprietor and editor, needs no introduction to the people of the West, where, as the Chicago correspondent of the Louisville *Courier Journal*, he has through his sagacity as a newsgatherer, combined with a pungent, incisive, as well as graceful style of writing, made a reputation second to none other journalist in the country. His thorough knowledge of the inner side of the great questions of the day, his wide acquaintance with public men, his intimacy with general literature and *belles-lettres*, backed by his phenomenal success as the manager of the Chicago office of a great journal, having made it what it is in the North as much as its home management has in the South, amply fits him for the great work he has undertaken. We are able, through personal knowledge of Mr. Wakeman as a gentleman of perfect integrity as well as through his well earned reputation as a journalist, to assure our readers that *The Current* will be conducted in a thorough manner and for this reason predict its success, while the statement made by him, the truth of which we vouch for in every particular, is that: "At this date, nearly three months in advance of issue, arrangements are nearly completed regarding all matters of publication and effective business progress; the *Current's* own offices and agents are secured in Europe; subscriptions and advertising exceeding $60,000 are already under pledge and contract; and, exclusive of this, a reserve cash capital of from $75,000 to $100,000 will be in bank before the first issue of the journal appears."

The West has arrived at that period where a journal must be of the highest character to succeed, and not only have the literary merit of those of Europe and our eastern cities, but must also sparkle with the wit, life and enterprise of the West, a comprehensive field, but one we feel the *Current* is fitly organized to sustain.

Inventive Genius in Building.

284,170. Water-tight joint for tiling, vault-covers, areas, etc. Emory Bosworth, Cleveland, Ohio.
284,191. Mould for casting pipe of plastic material. Daniel H. Dorsett, Chicago, Ill.
284,203. Vault cover and ventilator. August W. Herr, Chicago, Ill.
284,222. Blind-slat operator. Frederick Nelson, St. Paul, Minn.
284,282. Pile-driver. Roys J. Cram, Detroit, Mich.
284,299. Artificial stone. Peter F. Haverty, Shenandoah, Pa.
284,311. Pneumatic bell-ringing apparatus. Robert Latowski, Oels, Prussia, Germany.
284,336. Door-latch. Alfred L. Scranton, Rochelle, Ill.
284,371. Roofing compound. Daniel Brobst, Portland, Mich.
284,410. Window-screen. Seymour Glass and George H. Noble, Clintonville, Wis.
284,424. Leveling-instrument. William C. Holmes, Atlanta, Ga.
284,434. Fire-escape. Daniel A. Keech, Cannonsburg, Mich.
284,451. Fire-escape. Samuel MacCarty, Aurora, Ill.
284,539. Weather-strip. Henry Carter, Gold Hill, Colo.
284,542. Fire-escape. Alexander M. Dye, Minneapolis, Minn.
284,598. Wrench. Carl A. Blomquist and Theodore Buskirk, Toledo, O.
284,602. Weather-strip. Martin L. Bramhall, La Porte, Ind.
284,653. Compound for preserving wood and metal. Lorenzo D. Mott, Jr., Marshalltown, Io.
284,654. Alarm for elevators. Amos Nickerson, Somerville, Mass.
284,725. Compound for roofing buildings. Wm. Detrick, Indianapolis, Ind.
284,739. Saw-handle. Harrison P. Hood, Indianapolis, Ind.
284,747. Floor-clamp. Henry D. Margot, Mountain View, Cal.
284,845. Scaffold-bracket. Amos D. Hart, Elmira, N. Y.
284,873. Portable trestle. Wesley F. Marsh, North Platte, Neb.
284,878. Electrical Annunciator. David A. McCormick, Detroit, Mich.
284,893. Door-knob attachment. Edward L. Phipps, Milford, Mich.
284,941. Rabbet-plane. John M. Bennett, Green Island, N. Y.
284,944. Wood-cutter. John Burge, Westfield, Mass.
284,961. Door-bolt. William S. Hill, Cutler, Ill.
284,993. Sash-holder. William Abele, Zanesville, O.
285,006. Rolling window-screen. Ainsworth Brown, Colorado Springs, Colo.
285,051. Shingle-sawing machine. Moise Marcoux, St. Eugene de Grantham, Quebec, Canada.
285,079. Sash-balance. Warren Shumard, Richmond, Ind.
285,104. Blind. Michael J. Bird, East Saginaw, Mich.
285,112. Portable chimney. Leonard E. Clawson, San Francisco, Cal.
285,131. Composition roof. John F. Hoffman, Cincinnati, O.
285,137. Weather-boarding gange and clamp. Samuel A. Kennedy, Xenia, Ill.
285,179. Joint for earthenware pipes. John S. Tibbals, San Francisco, Cal.
285,180. Backwater gate for sewers. John S. Tibbals, San Francisco, Cal.
285,191. Water-closet valve. Peter White, St. Louis, Mo.
285,197. Fire-escape. Albert R. Yount, Yountsville, Ind.
285,273. Fire-escape ladder. Francis E. Josel, Freeport, Ill.
285,282. Fire-escape. Jeremiah Lockwood and John Kivett, Sullivan, Ind.
285,334. Electric Burglar-alarm. Alvah Wiswall, Cincinnati, O.
285,371. Eaves-trough Hanger. Jonathan P. Abbott, Cleveland, Ohio.
285,378. Bath-tub Attachment. Geo. P. Bassett, Cincinnati, O.
285,382. Lock. Joseph Breyer, Cincinnati, O.
285,405. Folding-square and Scale-holder. William H. Goldsberry, Cedar Rapids, Iowa.
285,452. Hollow-tile Arch for Ceilings. Peter B. Wight, Chicago, Ill.
285,471. Fire-escape. William Henry Harrison Doane, Morganville, Kan.
285,484. Screwdriver. Micajah C. Henley, Richmond, Ind.
285,575. Doorhanger. Benjamin J. Cloes, Lake Bluff, Ill.
285,601. Bevel-square. Michael Farley, Portland, Oreg.
285,605. Ladder. Orlando V. Flora, Madison, Ind.
285,606. Fire-escape. Paul Thomas Forsyth, Memphis, Tenn.
285,636. Metallic Tile for floors, etc. Andrew H. Lord, Chicago, Ill.
285,058. Sash-lock. Frederick Osterhage, Vincennes, Ind.
285,663. Package-elevator. Frank I. Pearce, Chicago, Ill.
285,669. Ratchet-wrench. Albert E. Petticrew, Springfield, O.
285,740. Fire-escape. Emil C. Eyl, Jefferson City, M. T.
285,744. Fire-escape. James H. Frazee and George M. Culver, Rushville, Ind.
285,756. Fire-escape. William A. King, Cleveland, O.
285,774. Apparatus for raising water from wells having water-bearing strata of different hydrostatic levels. John B. Yeagley, Indianapolis, Ind
285,776. Kiln for burning tiles, earthenware, etc. David Laemmle, Fort Wayne, Ind.



HOTEL-DIEU OF PARIS.

Lumber Notes.

The lumber trade of Mobile up to September 1, for 1882–3 was: Foreign, 16,779,012 feet; coastwise, 10,020,363 feet; total, 26,799,375 feet.

An energetic lumberman of Wilmington, N. C., has recently established a floating sawmill on the Cape Fear river. He manufactures boxes and half-finished shoe lasts, and has already shipped fifty thousand of the latter to the East.

The *National Car Builder* says Georgia pine is a timber which is being more extensively used every year in the construction of cars. It is so filled with resinous matter as to be almost indestructible and requires much less paint than more porous woods.

From 300 to 400 men are now employed on the Seattle and Tacoma road in Washington territory. A large amount of lumber and timber has been used in bridge-work. Orders by the million feet have been numerous. Two trestles across a Black river swamp required 1,000,000 feet of stuff.

Wells, Stone & Co., of Ogemaw, Wis., intend to build and put into immediate operation a large "long timber" mill on the line of new road running through their lands. The intention is to cut Norway pine into bridge and car timber of all lengths up to 65 feet, and ship to all points demanding that staple.

The Hull estate timber limits in Quebec, covering 2,700 square miles, were lately sold by Mr. Senecal to his colonization society for $2,500,000, the purchase including the mills and wharves; the latter at Montmorenci extend eight miles, and are reputed to be the finest on the continent. The property two months previous to the late sale cost Mr. Senecal $2,000,000.

The amount of logs hung up on the waters of the Upper Mississippi is estimated as follows: Prairie river, 18,000,000; Sugar Lake, 1,500,000; Swan river, 4,000,000; Willow river, 6,000,000; Moose river, 3,000,000; Platte and Hellman, 25,000,000; West Branch river, 18,000,000; Crow Wing, 3,000,000; Pine river, 2,500,000; rear of drive above Sauk Rapids, 101,000,000; total, 181,000,000.

The Apalachicola, Fla., *Tribune* reports in a survey of a raft that came from Calhoun county: There were four logs, sawed from one cypress tree, that scaled 36-inch diameter, 16 feet long; 38-inch diameter, 16 feet long; 40-inch diameter, 16 feet long; and 42-inch diameter, 16 feet long; making a grand total of 4,920 feet—Doyle's rule. The top log was perfectly sound, and all were of the best quality of white cypress, not a knot visible in any one of them. The *Tribune* says the lowland forests of Florida contiguous to the rivers abound in such monster trees.

A Toronto capitalist has lately been prospecting among the timber limits at the northwest end of Lake Winnipegossis, a body of water that lies northward of Lake Manitoba. He reports that the timber on the Porcupine hills is unequaled in any other part of the Northwest, and it is not surpassed on the continent.

Art Notes.

Architect F. Wm. Fieder is designing all the stained glass, mantels and special furniture for the residence of J. Guy Owsley on West Adams street. Mr. Fieder makes a special feature of decorative work in stained glass, cabinet work and textile fabrics.

The fresco painters of Chicago have organized a society and meet every Saturday evening at North Side Turner Hall at 8 p.m. Last Saturday a constitution was adopted and officers elected for the ensuing six months. The objects of the society are protective and the advancement of decorative art. There are fifty five members on the roll, and the number is increasing at each meeting.

The general exhibit of paintings at the Exposition this year is somewhat above the average, but the annual "Nude in Art" discussion has begun, the incentive being in some degree greater than upon any previous occasion. The special painting to which objection is made is a celebrated work by Beauguereau, entitled "Nymphs Bathing." As there are nine female figures, and eight are grouped on a bank in different attitudes suggestive of freedom from conventionality, if not from modesty, and the ninth is in the extremely small pool of water up to her ankles, not to speak of the suggestiveness of two satyrs peeping through the leafy background, it is hard for even the ultra-artistic to see anything especially elevating or instructive in the wholesale display of female anatomy. In the time of Titian and Gregorio, when female figures were painted or carved, they had a dignity of attitude and a purpose that spoke from every line or shade of color, and they were instructive because they were beautiful, and the suggestiveness of the present school of nude art was wholly absent.

Three windows of stained glass recently finished for the residence of G. S. Lord, at Evanston, are striking in their effect. One a wide prairie with a fire sweeping across it and realistic in its rolling smoke and flames, one is a beautiful sunset effect, and one a Japanese piece, conventional dragon, etc. But the most effective and strikingly artistic stained glass work Chicago has been favored with in small windows are exhibited by the same artists, Messrs. R. Roberts & Co., at their offiee. One is a hall window, with a night scene in opalescent and jewel glass, the leafy trees barely showing against the darker sky, and a wide-eyed owl in the foreground. One is a Japanese effect in the same glass, and one, and the best of the three, is certainly a marvel of design and workmanship. A mass of greens, yellows and reds, out of which the eye readily traces a huge sea-monster, while around him leap the fishes his passage disturbs and ever flying upward the spray from green waves, give an effect as indescribable, yet in its dazzling commingling of color like the bottom of a running stream in clear sunlight, only more strong, with a sweeping force like the dashing sunlit waves of Niagara. Paul C. Lautrup is sole designer for this firm, and it is readily seen where these unique and striking designs originate, a fact that with the exceptional quality of the work produced should bring this firm into prominence with the first stained glass artists of the country.

Synopsis of Building News.

Bloomington, Ind.—There has been over $300,000 worth of building done this season, the city never having experienced such a boom. Quite a large number of cottages are being completed and under construction, the architects being crowded with such work. The county commissioners at a recent meeting made the following appropriations for work: $50,000 for a new college; $11,000 for an artesian well and $18,000 for six miles of piping; $2,000 toward the construction of railroad shops and $1,800 for a city fire hall. Total, $82,890. All the architects are busy and the lookout for next season is even better.

Architects H. J. Nichols & Son: For Hurlburt Showers, two-story frame building, 50 by 70 feet, cost $4,000 (projected). For B. McGee, two-story brick addition to store, 32 by 20 feet, cost $1,200. For J. Stockwell, one-story brick store, 30 by 50 feet, cost $1,000. Smithville public school, one-story brick, 26 by 50 feet, cost $1,500. For B. Jacobs, Spencer, Ind., two-story store, brick with tin roof, 25 by 80 feet, cost $3,000. For Samuel Curry, Little Rock, Ark., one-story dwelling, 40 by 35 feet, cost $1,200. (All under way.)

Chicago, Ill.—There is no abatement in building, and new structures are springing up in all parts of the city, the greatest number being modern "flats" for renting. There are no idle hands among the sons of Hiram.

Architect J. F. Doerr: For Wm. Noll, No. 2128 South Park avenue, two-story and basement brick, 22 by 45 feet, cost $3,500 (just completed). For Robert Opitz, two-story basement and attic brick, 22 by 42 feet, cost $3,100 (near completion). For J. H. Thompson, Michigan avenue near Twenty-sixth street, two-story stable, 24 by 30 feet, pressed brick, cost $2,000. For J. Hinsberger, South Park avenue near Thirty-first street, three-story and basement, 22 by 52 feet, pressed brick, cost $5,675. For R. Seedorf, No. 3009 Wentworth avenue, two-story and basement store and dwelling, 22 by 72 feet, cost $5,800. For Henry Schell, southwest corner of Wentworth avenue and Thirty-ninth street, three-story and basement store and dwelling, 23 by 107 feet, cost $12,000. For John Rumpf, Humboldt, frame schoolhouse, 22 by 42 feet, cost $2,600. For Wm. Meyer, Humboldt, frame residence, 22 by 52 feet, cost $3,000. (All of the above under way.)

Architects Bauer & Hill: For Chas. Halla, three stories and basement dwelling, 25 by 68 feet, front of St. Louis pressed brick and Cincinnati brown stone, cost $14,000. Just commenced; various contractors.

Architect W. L. B. Jenney has completed the additions to the Sears 99 and 101 Washington, including two stories, elevator, and all modern improvements, which make this office building convenient and elegant. Cost of improvement, $25,000. Also improvement in corner store of Lakeside building, which includes the removal of a heavy stone corner pillar, one of iron being substituted, and a general new front, which, with decorations, stained glass, etc., will cost $3,000. Also dwelling-house on Third avenue, south of Harrison. Anderson pressed brick, three-story and basement. Cost, $5,000. Also residence for Mrs. Harriet E. Hale, 22 Walton place, three-story, Anderson pressed brick, and cut stone. Cost, $6,000. A residence at Downer's Grove, Ill. Cost, $7,000. Residence for H. D. North, at Riverside, Ill., modern cottage style. Cost, $5,000. Greenhouses for Messrs. Hasemeyer & Mundy, at their Riverside villas. Cost, $3,000. A conservatory and greenhouse added to house of David Lyman, at La Grange.

Architect Theo. Karls: For Britten & Guth, two two-story and basement dwellings, 46 by 56 feet, with Anderson pressed brick fronts, at Nos. 3412 and 3414 South Park avenue, to cost $14,000. For Michael Brand, two dwellings, three stories and basement in height, 40 by 70 feet, Anderson brick fronts, at Nos. 266 and 268 Erie street, to cost $16,000. For Mrs. Susan A. Buschick, two two-story and basement dwellings, 36 by 58 feet, Indiana brick fronts, at Nos. 952 and 954 North Clark street, to cost $12,000. For Thomas Enright, a store and dwelling three stories and basement high, 35 by 75 feet, at the corner of Thirty-first and Butterfield streets, to cost $15,000. For M. Gaensslen, a fine residence at No. 623 Dearborn avenue, to cost $16,000; the house will be two stories, attic and cellar, and will be 32 by 68 feet in size; the front will be of Anderson pressed brick, with rich stone trimmings, and of elaborate design; the interior will be finished in hardwoods and be heated throughout with steam. For Capt. Fred. Gund, a three-story flat-house at No. 525 North Clark street, to cost $8,000; it will have a front of pressed brick, trimmed with stone; it will be 24 by 68 feet in size, and will be well finished. For C. Ingwersen, a residence and barn at No. 3760 Forest avenue, to cost $14,000; the house will be 26 by 68 feet, and two stories, attic and cellar in height; the fronts will be of Anderson brick, trimmed with stone; the barn will be 24 by 30 feet, and two stories high. For D. Mahon, two three-story flat-houses on Walton place, near the Lake Shore Drive, 50 by 72 feet, to cost $17,000. For C. Trapp, a store and dwellings, three stories and basement high, 25 by 72 feet, at the southwest corner of Thirty-eighth and Butterfield streets, to cost $9,000; the fronts will be of pressed brick, and the upper floor will be divided into two flats. Remodeling A. B. Fielder's old tassel factory at the corner of Goethe and Wells streets into an apartment house for small families; there will be sixteen apartments of three and four rooms each, supplied with all conveniences. Special attention has been paid to ventilation and drainage.

Architect John Otter is about to start the following buildings: For P. O'Malley, a three-story flat-building on Hammond street, near Wisconsin, to cost $7,000. For H. Lyberg, a three-story flat-house, 24 by 78 feet, on Wells street, near Locust, to cost $8,500. For F. Bush, a three-story flat-building, 22 by 75 feet, on Sedgwick street, near Hobbie, to cost $9,000. A new church for the Methodist Society at the corner of Noble and Baxter streets, 30 by 40 feet, to cost $2,600. An addition to the residence of C. Axell, Lake View, to cost $2,000.

Cincinnati, O.—Present outlook is good, and architects and builders are busy.

Architect Geo. W. Rapp: For Herancourt Brewing Co., four-story storage house, 46 by 140 feet, brick walls and asphalt roof, cost $65,000; Blust & Tinnemeyer, contractors. For Gerke Brewing Co., four-story brick stable with basement, tin roof, 50 by 85 feet, cost $15,000; same contractors. H. H. Hoffman, remodeling dwelling, 132 Broadway, cost $1,500; A. Weisgerber, contractor. For H. Enneking and others, three three-story brick dwellings, on Myrtle avenue, Walnut Hills, slate and tin roofs, each 28 by 55 feet, cost $18,000; J. W. Goldkamp & Co., contractors. (All of the above under way.) For Thos. Pagne, two-story frame stable, shingle roof, 18 by 26 feet, cost $1,000. (Projected.)

Architect C. Crapsey: For Mrs. E. A. Horton, two-story dwelling on Ashland street, cost $5,500.

Architect Samuel Hannaford: For J. Smith, Jr., six-story building in flats, 27 by 200 feet, on Seventh street between Elm and Plum streets, cost $30,000; H. E. Holtzinger, builder.

Denver, Colo.—The building outlook for the winter is fairly good. Material and labor of all kinds in full supply and not likely to advance during the next six months.

Architect W. H. J. Nichols: For G. G. Symes, three-story and basement business house, 50 by 125 feet brick with stone trimmings and gravel roof, cost $30,000; W. H. Smith and Halleck & Howard, contractors (under roof). For F. M. Davis, two-story and attic residence, 38 by 65 feet, basement stone, superstructure brick, shingle roof; also carriage house, 26 by 50, and outbuildings brick, cost $14,000, built by days' work and well forward. For C. R. Welch, two-story and basement brick with stone trimmings, basement stone, roof shingle, cost $8,000; roof on and work by various contractors. For Denver Orphans' Home Association, two-and-a-half stories and basement, 55 by 50 feet, basement stone, superstructure brick with stone trimmings, cost $9,000 (being plastered); Norton & LaDue, contractors.

Dubuque, Iowa.—Building matters moving quietly.

Architect F. D. Hyde: For Sisters of Visitation school building, three-story and basement brick, 36 by 60 feet, cost $6,000; J. McQuillan, contractor. For S. S. Smith, two-story frame cottage, cost $2,500. (Both under way.)

Architect F. Kerr: For addition to St. Joseph's Academy, three-story and basement brick, 54 by 100 feet, cost $10,000. For Sisters of Presentation, addition to building, by 90 feet, brick, cost $7,000. (All under way.)

Evansville, Ind.—The present outlook is good, having improved much within the past month.

Architects Reed Bros: For H. W. Smith, improvements to two-story residence, cost $3,000; Rose & Rucker, contractors (work just commenced). For E. & T. H. R. R. Co., station-house, Hort Branch, Ind., brick and stone, one-story, 40 by 100 feet, cost $5,000 (not yet begun). For Judge Little, improvements to residence, cost $4,000 (not let). F. Burns, improvements to residence, cost $3,500; G. Mutchler, contractor.

Indianapolis, Ind.—The outlook for business is fair. There is sharp competition amongst contractors and bids run low; the sequence is that good work can be obtained only by "eternal vigilance."

Architect C. A. Wallingford: For Lewis Falley, Lafayette, Ind., frame residence, 46 by 60 feet, cost $11,000; Herzogg & Watkins, contractors. For M. L. Garber, Columbus, O., frame residence, 35 by 59 feet, cost $6,000. For A. H. Nordyke, brick residence, 44 by 88 feet, cost $16,000; A. Shallenberger, contractor. For Geo. Beck, frame residence, 36 by 65 feet, cost $8,000; Stanley & Saulsbury, contractors. For E. Hegge, frame residence, 35 by 62 feet, cost $5,500: T. Moran, contractor. (All of the above under way). For A. W. Hatcher, Columbus, O., frame residence, 33 by 53 feet, cost $5,000. For M. A. Wein, New Albany, Ind., brick residence, 35 by 65 feet, cost $7,000. For Ellsworth Mining Co., Staunton, Ill., brick business house, 40 by 120 feet, cost $14,000. For C. Fairbanks, Terre Haute, Ind., brick residence, 45 by 65 feet, cost $12,000. All of the above projected.

Joliet, Ill.—Business fair and prospects encouraging.

Architect O. Johnson: For Enterprise Manf. Co., three-story building, 34 by 80 feet; one-story building, 38 by 50 feet, walls of both stone, cost $8,000; O. Johnson and Wenberg & Co., contractors. For J. E. Brush, three-story stone block, iron front, 65 by 98 feet, cost $10,000; Wenberg & Co., contractors. For E. S. Monroe, three-story stone block, iron front, 67 by 120 feet, cost $25,000; E. Erickson, contractor. For Baptist Society, church building, frame, 40 by 60 feet, cost $2,000; J. H. Campbell, contractor. For Presbyterian Society, church building, frame, cost $2,500; J. B. Scutt, contractor. For S. Z. K. Prime, Dwight, Ill., improvements to premises, cost $1,500; J. Walker, contractor. For Spire on Episcopal church, New Lenox, Ill., cost $500. Spire on M. E. church, same place, cost $600. For W. Cameron, Lockport, Ill., improvements to premises, cost $300. For Geo. Chamberlin, mansard roof, etc., to building, cost $1,000. For G. J. Monroe, improvements to premises, cost $1,500. (All of the above completed.) For Joseph Ward, Lockport, Ill., dwelling, cost $6,000; J. H. Deeming, contractor. Parsonage to Universalist church, same place, cost $3,000; J. B. Seely, contractor. For Dr. J. A. Campbell, frame dwelling, cost $2,500; J. H. Campbell, contractor. Improvements to police station, cost $1,000. For F. Plant, frame dwelling, cost $10,000. (All of the above are nearly completed.) For G. H. Monroe, dwelling, cost $2,000 (not yet commenced).

Kansas City, Mo.—Business is rather slack and the promise of the future not extra encouraging. There are some good buildings talked of for the next season, but only in a few cases are plans called for.

Architect Wm. Nier: For Keystone Iron Works, shops and foundry, two stories, brick walls, 257 by 128 feet, cost $20,000; D. Underwood, contractor. For Crookson Bros., Iron Works, one-story, brick walls, 50 by 100 feet, cost $4,000; Hammond & Force, contractors. For D. M. Jarboe, four-story brick block, 44 by 96 feet, cost $12,000; Welch & McCleary, contractors. For N. G. Hammond, two-story brick store and dwelling, 24 by 70 feet, cost $4,000. (All of the above completed.) For A. Brisbane, four-story and basement, brick walls, 62 by 120 feet, cost $25,000. Same party, six-story office building, brick walls, 42 by 132 feet, cost $45,000; Underwood & Vaughn, contractors. For P. Lyon, two-story frame dwelling, 18 by 36 feet, cost $1,200. For M. S. Tyler, two-story brick dwelling, 36 by 40 feet, cost $5,000; T. Stephenson, contractor. For J. Benoist, double two-story brick dwelling, 36 by 40 feet, cost $8,000; P. Guinan, contractor. For J. W. Cross, two-story frame dwelling, 20 by 36 feet, cost $2,000. (All of the above under way.)

Milwaukee, Wis.—Building is quite lively at present, although slacking some. The outlook for the winter and spring is very good.

Architect A. Elleson: For M. Lamers, three-story brick and stone dwelling, 25 by 80 feet, cost $6,000; W. Denoyer, contractor. For W. Weimer, one and a-half story cottage, cost $1,500; W. Luetzke, contractor. For T. O'Connor, three-story brick and stone dwelling, 26 by 50 feet, cost $3,000; J. Schunk, contractor. For A. Scheck, one-story frame cottage, 22 by 44 feet, cost $1,100; J. Walleman, contractor. For J. Meyers, one-story frame cottage, 22 by 48 feet, cost $1,450; B. J. Danielson, contractor. For J. Reuter, three-story frame dwelling, 26 by 44 feet, cost $3,500; for same party, one and a-half story frame dwelling, 24 by 44 feet, cost $1,500; H. Kamschutte, contractor. For D. Wagner, one story and a-half frame dwelling, 22 by 46 feet, cost $1,800; C. W. Hahn, contractor. For J. Serstner, two-story brick and stone dwelling, 35 by 60 feet, cost $4,600; C. W. Hahn, contractor. For J. McGrath, two-story frame dwelling, cost $900. For H. Millman, three-story frame dwelling, 26 by 48 feet, cost $2,600; Westphal & Gloyer, contractors. For H. Westphall, two-story double-brick store, 42 by 50 feet, cost $5,300; same contractors. For L. Schneider; one and a-half story frame dwelling, 22 by 44 feet, cost $1,400; C. Ruetz, contractor. For J. Christensen, five one and a-half story frame cottages, 22 by 46 feet, cost $5,600; F. Saltman, contractor. (All of the above completed.) For St. Mathias congregation, brick church building, Gothic style, 49 by 109 feet, cost $18,000; J. Schunk, contractor. For R. S. Owens, Jr., row of brick tenement houses, 49 by 117 feet, cost $10,000; Flynn & McDonald, contractors. For J. M. Nickell, row of brick tenement houses, 46 by 120 feet, cost $10,500; Ph. Geluk, contractor. For Geo. Boos, two-story frame dwelling, 22 by 48 feet, cost $2,200; Ph. Strohm, contractor. For J. Falkner, two-story brick dwelling, 32 by 46 feet, cost $2,450; F. Swaboda, contractor. For G. Paul, one and a-half story frame dwelling, 22 by 48 feet, cost $1,300; same contractor. For A. M. Huenneken, two-story brick store, 22 by 50 feet, cost $2,300; P. Huenneken, contractor. For A. Ellison, two-story frame addition, cost $1,100; F. Swaboda, contractor. For J. H. Nichols, two-story frame addition, cost $700; for same, rebuilding two frame stores and dwellings 44 by 50 feet, cost $2,500; H. Kawschulte, contractor. (All of the above under way.)

Minneapolis, Minn.—Builders and architects are fairly busy and the outlook is good.

Architect J. Haley: For John King, five tenements, 116 by 36 feet, three stories high, solid brick walls with brick fire-walls, cost $20,000 (under way by days' work). For C. H. Pratt, two double and three single dwellings with four barns, all frame, cost $25,000; R. L. Burgland, contractor. For W. Neill, frame dwelling, cost $3,000; same contractor. For Judge Beeby, frame dwelling, cost $2,000 (being done by days' work). (All of the above just begun.) For Mr. Jeffrey, six brick tenements, 129 by 34 feet, cost $20,000 (plans now being drawn).

Moberly, Mo.—Builders at present are quite busy. About twenty small residence buildings, brick and frame, are in course of construction. The outlook is fair.

Architect Ed. Cooke: For Chas. Semple, Huntsville, Mo., hotel, brick, 45 by 80 feet, cost $3,600. For Suppie Bros., two two-story brick stores, gravel roof, 50 by 80 feet, cost $2,500. For A. Master, two-story, ten-room residence, cost $2,500. For E. Bloomfield, one-story store building, cost $1,700. (All of the above under way.)

Topeka, Kan.—Building business good and outlook good.

Architects Wood & Haskell: For S. H. Lehman, Newton, Kan., two-story residence, brick, 40 by 60 feet, cost $10,000. For J. R. Hathaway, Billings, M. T., two-story frame residence, 28 by 47 feet, cost $3,500. For Indian school, Lawrence, Kan., stone walls, cost $50,000. For Indian school, Genoa, Neb., brick walls, cost $18,000. For Indian school, Chiloco, I. T., stone walls, cost $14,000. For Indian school, Devil's Lake, D. T., frame, cost $15,000. For Indian school, Rosebud, D. T., brick walls, cost $20,000. For Indian school, Albuquerque, N. M., brick walls, cost $20,000. For Indian school, Fort Sill, I. T., frame, cost $18,000. For Cowley Co. bank, Arkansas City, Kan., two stories and basement, brick and stone, 25 by 80 feet, cost $9,000; John McDonald, contractor. For Newman, residence, same place, two-stories, stone with tower, 40 by 55 feet, cost $12,000. For State University, Lawrence, Kan., chemical laboratory, one-story, stone and brick, cost $11,000; Smith & Sargent, contractors. For B. D. Eastman, Topeka, Kan., two-story and attic, frame residence, 37 by 60 feet, cost $8,000; M. Council, contractor. For J. P. Griswold, two-story and attic stone residence, 40 by 65 feet, cost $18,000; Smith & Sargent, contractors. For Christian hospital, frame, two-stories, 38 by 140 feet, cost $10,000; same contractors. Bishop Vail, two-story frame residence, 37 by 59 feet, cost $4,500; same contractors. For bank, Garnet, Kan., three-story, brick, 25 by 80 feet, cost $9,000. For bank, Newton, Kan., two-story, brick, 28 by 75 feet, cost $7,800. For bank, Eldorado, Kan., two-story, brick, 25 by 80 feet, cost $7,600.

ARCHITECT GEORGE H. EDBROOKE has been engaged upon for some time and now completed plans for a nine-story office building to be erected upon the lot 100 by 131 feet adjoining the new Commercial bank building on the south on Dearborn street. The proposed building will be of pressed brick and brown stone trimmings and the design compares favorably with the best structures recently erected in Chicago, and will introduce some new features in architecture gathered from observations made by the architect during a recent visit to Europe. The projectors are John D. Carson, son of J. B. Carson, of Quincy, and A. L. Cooper, the real estate man. Ever since the ground the Commercial is on was leased different rumors have been circulated regarding this lot and this will probably settle the question. We say probably because, though the plans have been approved by O. F. Aldis, the agent of Shepard Brooks the owner of the property, the building is not a positive certainty until the lease which has just been sent east is returned signed and the required guarantee is deposited in the bank. All this will probably be done as as the projectors are men of known responsibility and enterprise.

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THE

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L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

MIFFLIN E. BELL, of Des Moines, Iowa, was appointed supervising architect of the United States, October 30. Though we still hope the senate, in view of the many irregularities which have made this office notorious in the past will take some action in the matter, and if possible place it in charge of a topographical engineer, with liberty to employ the best architectural talent of the country at the rates and under the same general rules that govern private enterprises, we are glad to see the place temporarily filled by a Western architect, and one who has a clean record and a reputation for constructive ability such as is enjoyed by Mr. Bell. He is a native of Chester county, Pennsylvania, and though but thirty-six years of age, has seen considerable service. He commenced his work in the West as a pupil of A. H. Picquinard, the architect of the Illinois state capitol, and was assistant superintendent of that building under Mr. Picquinard. When that architect died in 1876, while building the Iowa state capitol, Mr. Bell succeeded him in the superintendence, which position he held at the time of his appointment. The Southern Illinois State Penitentiary was also planned and built by him, and through his connection with the work on public buildings he became intimate with many public men, both of Illinois and Iowa.

THE hold the question of Sanitation is taking on the public mind is exemplified by the notable meetings that are being held among all civilized peoples, who seem to have suddenly awakened to a realization of its grave importance. Among the most recent of these meetings, worthy of more than a passing notice, is the Sanitary Congress at Glasgow, Scotland, just closed, which for thoroughness of detail and scope of operation excelled all similar public demonstrations that had preceded it. The instigators and managers thereof seem to have comprehended the fact that the subject was one that, at least, included all professions and trades which in any degree contribute to the construction of the houses people live and work in, and consequently provided for the extensive exposition which took place of almost everything that forms a part of the homes and workshops of the people—not omitting decorations and embellishments in their recognition that healthfulness may be subserved by catering to the mind as well as the body. One of the most interesting features of this memorable occasion was the series of papers and popular lectures that were delivered by eminent sanitarians and architects for the purpose of educating the people to a better understanding of sanitation and enlisting their coöperation. Among the contributors and speakers of these papers and lectures were Dr. Carpenter, Professor Robinson, Roger Field, Professor De Chamount, Professor Humphrey, Professor Roger, T. Smith, Messrs. Burdett, Cole, Collins, and a number of others equally eminent. In a very interesting paper on "London Dwellings" by President Professor Smith, read before the engineering and architectural section, the key-note of all the other papers and lectures was struck when he come to treat of the Public Health Act and said: "But if we could once create a demand for healthy houses, and induce people to look out for sanitary provisions as they now looked out for pretty wall-papers when taking a house, the battle would be won."

FROM Professor Smith's very practical contribution it would appear that old London was comprised mostly of houses that were unhealthy owing to defective sites, bad drainage, bad plumbing, defective water storage, absence of proper air space, dampness and foulness of basements, unsoundness of attics and upper stories that were neither damp-proof nor heat or cold proof, and the narrowness of the thoroughfares; a statement which was verified by Dr. Richardson, who cited some deplorable instances, and declared "amongst the better-class houses things were often even worse than in those of the lower class." In the newer London, particularly in the suburbs, a better state of affairs existed, but even there, as the professor said, there was an ample field for years to come for the energies of those who devoted themselves to the pursuit of sanitary science, the diffusion of sanitary knowledge, and the performance of sanitary work. Another equally interesting paper on "Middle-class Dwellings" in London, by Mr. Burdett, which referred particularly to those of modern construction and from which is to be gathered, London is not exempt from a class of builders with which the American public in the large cities are well acquainted. The conundrum with Mr. Burdett, in contemplating this class of structures, was "Why did

not the lower middle-classes combine in self-defense and crush their present oppressors — the pothouse politicians and the jerry builders?" and in that way put an end to one criminal source of sanitary ills. Perhaps the most encouraging incident of this congress was the large and enthusiastic audience that assembled in St. Andrew's Hall to hear Dr. Carpenter's lecture to the working classes.

THE State of Georgia proposes to have a new State House at Atlanta, which is to be a marvel, not only as to style, but magnitude, or quantity of structures for the amount expended; that is, if the Board of Capitol Commissioners shall succeed in securing the builder, workmen and materials at the same low rate they propose to secure the designer, viz, at about one-seventh the usual fees for such service. We glean this interesting information from the invitation of the Governor and ex-officio chairman extended to the architects of the country to furnish plans for this proposed structure on the following conditions:

"1. An elevation of each side of the building, on a plan of each floor — drawn in black ink only, and to a uniform scale of one-eighth of an inch to the foot. 2. A perspective view of the building, which may be done in colors. 3 Detailed and accurate specifications of material and workmanship, so arranged that the work may be let to one contractor or to several contractors for the various classes of labor and material. 4. Such other drawings as may be necessary to fully elucidate the plan. 5. A detailed estimate of the cost of the building, which must not exceed $800,000. For the accepted design under these conditions, the Commissioners will pay the sum of $3,500, provided the architect furnishing it will deliver within a reasonable time after the award is made, complete and satisfactory detail and working drawings. The Commission reserve the right to reject any and all plans."

Could anything be more alluring than this invitation to architects to compete with each other at one-seventh the customary compensation, and that, too, with the magnanimous prospect of having all their plans returned to them? Could anything be more generous than to offer the successful competitor just as much more money as it would cost any one of them to get up the plans as proposed? In seriousness: our position of opposition, as expressed on different occasions, to this meretricious practice of boards and commissions of procuring plans for public edifices does not arise from any disposition to faultfinding, but from the fact that this pernicious practice is the positive source of the many abortions in public architecture which have been inflicted upon the people of this country, and which should meet with a speedy end; for the public edifices of the country are meant for all time, and the people who pay for them are entitled to the best that architecture and the concomitant arts are capable of producing. No reputable and capable architect is ever led into a competitive snare where an insufficient tender is made the bait for his skill and experience, particularly where the merit of his work is to be decided by the whims or partisanship of incompetent city councils. county commissioners and state boards, but it is in this way that the designing and construction of our asylums, court-houses and state houses have fallen the prey to mediocre talent, which has certainly done its worst in doing its best. In our last number we furnished a typical example of the working of this competitive system for the procurement of architectural plans in the recital of the action of the management of the St. Louis Exposition and Music Hall Association. We do not allege that a like dishonorable course will be pursued by the Capitol Commissioners of Georgia, yet, as they have no higher conception of the trust imposed upon them than to ask the architects of the country to make an actual outlay of from $1,200 to $1,500 in getting up such plans as they specify, with only the possible chance that some one of them may win the dubiously promised award of $3,500, it would seem they were not overburdened with architectural wisdom — not sufficiently so, at least, as to disarm suspicion among the qualified architects of the country and make them think it worth their while to lay aside their other more lucrative work to take a chance in this Georgia lottery scheme.

HOW reputable architects are treating this question we are able to illustrate, the occasion being another similar scheme for securing architectural services for nothing, and which also comes from the South, though the disease is and has been epidemic in every state in the Union where public buildings have been projected. This latest invitation comes from New Orleans, addressed to architects, and is for "competitive designs for the main building of the World's Industrial and Cotton Exposition." It reads:

I. Preliminary plans and specifications for the main building of the World's Industrial and Cotton Centennial Exposition, to be erected at New Orleans, Louisiana, will be received at the office of the Director-general, No. 74 Baronne street, New Orleans, until 12 o'clock noon on the 24th day of November, 1883.

II. The principal material of said building shall be wood, and it must have a capacity of not less than 1,000,000 square feet of available exhibiting floor space, including gallery exhibiting floor space, and cost not exceeding $250,000, completed, ready for occupancy, exclusive of the outside and inside painting and plumbing.

III. Drawings will consist of ground plans drawn to a scale of 1-16 of an inch to a foot; elevations and sectional drawings done in India ink exclusively and drawn to a scale of ¼ of an inch to a foot, and one perspective.

IV. The Board of Management reserves the right to reject any or all the drawings and specifications, and it is expressly understood that the Board will not pay for any drawings and specifications so rejected.

V. The premium given to the successful competitors will be considered as in full payment for the services rendered, and said designs shall be the property of the Board, which may or may not use the same, in whole or in part, at pleasure.

VI. It will be optional with the Board of Management whether or not the successful competitors shall be employed in the construction of the building.

VII. Premiums will be awarded to the plans accepted, not exceeding three in number:

To the first plan accepted.....$1000
To the second plan accepted..... 500
To the third plan accepted..... 250

VIII. All designs and drawings not accepted will be returned. Preference will be given to those making the nearest approach to the requirements stated, and in their plans combining convenience, requisite exhibiting space and beauty of design.

IX. Each architect submitting a design may personally appear before the Board to explain the same, and answer detailed questions to construction and as to the reliability of estimates.

X. If the work cannot be let within or approximating the cost herein indicated, the award shall be considered null and the competitor shall be entitled to no compensation.

XI. Blue print of ground approaches and line of river distance, together with local price lists of material and cost of labor, will be furnished on application to the Director-General.

E. A. BURKE, *Director-General.*

Approved: E. Richardson, *President.*

New Orleans, October 25, 1883.

We were so fortunate as to secure a copy of the answer sent by a leading Western architect upon receipt of this invitation, and it voices the sentiments of every reputable architect in language rarely expressive and to the point. It is a letter that every director of public building should "paste in his hat" for future reference:

Mr. E. A. Burke, New Orleans. October 29.

Dear Sir,—The invitation to architects to send in competitive designs for the main building of the World's Exposition to be erected in New Orleans, is before me. Allow me to say that I have never seen a much better arranged scheme to defraud the architects who may be *green enough* to send in plans under the proposition laid down in the articles 4, 5 and 6 of your circular. Competitions are bad enough when carried out in good faith, but when a board of managers start out with the proposition that they will take all that is sent in and pay nothing for it in return, it is about time to put a stop to the practice.

With the best wishes for your success and thanks for your thoughtfulness in sending me an invitation.

I remain yours, etc., ——— ———.

P.S.—Allow me to say that for the sum of $2,500 paid to me I will be pleased to make you general drawings for the proposed building.

Yours, ——— ———.

As we have said we do not seek to show the rottenness of the system of so-called competition, and the enormous assurance displayed by the public men, who seek to obtain the benefits of the highest and grandest of human arts without even giving compensation for the mechanical work involved, to be illnatured, but that a better, more honest and pure method may be adopted, not alone that the architect may be paid for his work, but that public buildings may bear the stamp of genius, where now the majority of them display a conception worse than mediocre.

THE enormous strides the building industry of the United States has made since the commencement of the present decade, and, more particularly, during 1882 and 1883, is shown by *Bradstreet's Report* for the week ending October 6th, which is largely devoted to statistics, showing the amount of building that has been done during the time in the principal cities of the Union. Very much difficulty lay in the way of gathering complete information, as out of over fifty cities canvassed by their correspondents, only sixteen were able to furnish complete records owing to the absence of the statistics at the cities themselves. From this statistical exhibit Chicago leads all the other cities of the country, with the

exception of New York, in the amount of money expended in building enterprises. The order in which the cities ranked according to this report for the eight months of 1883, based on the gross amount, in round numbers, expended by each in building, is as follows:

New York	$37,207,112	Kansas City	$2,000,000
Chicago	12,780,000	Grand Rapids	2,000,000
Cincinnati	11,000,000	Toledo	1,420,000
St. Paul	9,580,000	Pittsburg	1,420,000
Minneapolis	8,310,000	Memphis	1,300,000
Cleveland	3,750,000	Indianapolis	1,250,000
New Orleans	3,000,009	Burlington	1,100,000
Denver	3,000,000	Milwaukee	1,070,000
Des Moines	2,750,000	Nashville	1,050,000
Detroit	2,580,000		

The number of buildings given for this expenditure of $12,785,440 by Chicago, in the eight months of 1883, is 2,421 as against 2,637 for the year of 1882, at a cost of $15,832,000.

THE St. Louis Institute of Architects held a special meeting on the 29th ult., to adopt resolutions drafted by a committee of five members embodying the sentiments of the Institute, regarding the action of the Exposition board of Directors, relative to the selection of an architect, the details of which we gave and commented upon last month. The general feeling among the architects is that the action of the board was an outrage, but the fear of offending prospective clients seemed to influence some against coming forward and boldly expressing their opinions. The resolutions were as follows:

WHEREAS, The St. Louis Exposition and Music Hall Association did, on the 18th day of April last, issue a circular inviting all the resident architects of this city, and five non-resident architects, to submit designs for an "Exposition and Music Hall Building," said circular containing among other articles, the following:

Second, That from those presented by residents, seven, which shall be considered the most meritorious, shall be accepted and awarded five hundred dollars ($500) each, and the five presented by non-residents shall each be awarded the same amount. All designs for which five hundred dollars ($500) is paid, shall be the property of the Association.

Fourth, The architect who is successful shall not receive five hundred dollars, but he shall be engaged as architect and superintendent, and shall be paid for performing such duties, the usual commissions, as adopted by the American Institute and St. Louis Institute of Architects.

Sixth, That said plans and specifications shall be placed under seal in the hands of the secretary, on or before July 2, 1883, and they shall be without names or marks to indicate by whom made.

AND WHEREAS, The above circular was issued for the information of architects, and to be by them interpreted according to their rules of practice.

AND WHEREAS, It is the interpretation of the "St. Louis Institute of Architects," that all architects who delivered their designs on or before the 2d day of July last, to the said St. Louis Exposition and Music Hall Association, did enter into a contract with said Exposition and Music Hall Association, in good faith—as binding as any written paper signed by both parties could make it; that every article of the circular issued by said association should be fulfilled, provided the said architects had carried out their part.

AND WHEREAS, It is the interpretation of said Institute of Architects that said Exposition Hall Association was in honor bound to select from the twelve awarded designs one that would be the most meritorious entitling the author to compensation as architect and superintendent.

Therefore, be it resolved, That whether the most meritorious design of the twelve was or was not selected, the said Exposition and Music Hall Association, by its subsequent acts, did break their contract with the architects submitting designs; in this, that if the most meritorious was not selected, they broke their contract, because by their circular accepted by the architects they were in honor bound to make such selection, and if they did not make such selection, they broke their contract by not giving the successful architect employment and compensation as architect and superintendent.

Be it further resolved, That we, the St. Louis Institute of Architects, consider the decision of said Exposition and Music Hall Association as unfaithful, according to their printed circular, unwarrantable according to architects' rules of practice, and unworthy their character as gentlemen and business men of this community; said characters being an additional and a strong inducement to the fair terms of the circular, for the architects to go into the great labor, study and expense of competitive designs.

Be it further resolved, That the foregoing preamble and resolutions be spread on the minutes of this Institute.

We congratulate the St. Louis Institute of Architects upon their denouncement of the treatment they received at the hands of so-called business men, and hope it will deter them, individually and as a body, from having anything in the future to do with competitions where the full price is not tendered for each and every plan before it is drawn.

AN accident, that in its serious quality was only limited by its early discovery, is reported from Des Moines, Iowa. It seems that electric light and telephone wires by contact started a fire, which resulted disastrously to the latter. Where the wire of the electric light crossed the wire of W. W. Kimball & Co's telephone, the current passed to the latter wire and burned their instrument very badly; and, from thence, it was communicated to the Fort Dodge instrument and to the telephone in use by Giles Williams, with the same disastrous result to the instruments. The current also played sad havoc at the Exchange, burning out one section and causing delay and confusion. Water was poured on the switchboard and the current shut off. When this was done a great many business men were left in the dark. As the use of electric lights is destined to become as general as that of the telephone, extraordinary care should be used in the placing of the wires, as, aside from the direct damage resulting from a contact of wires and the consequent fire, a series of such accidents will prejudice the public against the use of electric lights and retard the introduction of this incomparable light-producing system. The thorough insulation of all exposed wires is the only sure method of preventing accidents, and this should be insisted upon in every case.

AS from time to time we have looked upon the many "small flats" that are being hurried up in almost every division of the city, we have thought how soon the builders thereof will have occasion to repent at their leisure the grave error committed in building them. Seemingly, every recognized rule for health and convenience has been violated in their construction; everything else lost sight of save the amount of rentals that may be obtained from a given space. The façades of most of them are made comely enough, but when this is said, all commendation must cease. The entrance and passage-ways to these structures are so small, one wonders how ordinary household furniture may be got through them; while the diminutive bedchambers, scarcely large enough to admit a chair in addition to a bedstead, are suggestive of a polluted atmosphere, capable of producing any character and quality of disease. Such tenements may be speedily filled by the advertised bait of "all modern conveniences," but the occupants will not be long in discovering truthfulness would have made the rendering "all modern inconveniences!" When wiser builders come to the front, as surely they will, and build houses for rental in which health and home comforts are made possible, then these "economical flats" will be deserted by their tenantry as rats desert a sinking ship, and the owners be left in the plight of the man who drew the elephant in the lottery. Believe us, this "small flat" contagion, in its present shape, is a misfortune, and the speedier the epidemic dies out the better.

AN opportunity is offered for a display of the genius of American artists in the furnishing of designs for a proposed national monument to the memory, and in honor, of the late President, James A. Garfield, to be erected in the Garfield plot in the cemetery at Cleveland, Ohio, which comprises two and one-half acres on the highest point in the cemetery. The monument is to be of granite and bronze, to cost $150,000. The trustees of the Garfield National Monument Association decided at a meeting, held on the 18th ult., to issue to the artists of the country a circular inviting international competition on the following conditions: 1. All designs to be represented by models or drawings on a scale not to exceed one-twentieth of the proposed size, with estimates of cost. The trustees reserve the right to require any drawings they may judge desirable to be represented in a model before the final decision. 2. Each design to be accompanied by a sealed letter inclosing the name and address of the artist. Upon the envelope shall be a mark or motto similar to a mark or motto upon the model or design to identify the artist and his work. 3. The designs to be presented by the 1st of May, 1884, in the city of Cleveland, Ohio, free of cost to the trustees, to be exhibited in rooms provided by the trustees, but at the artist's risk; to be removed by the artist within two months after a decision is announced, or otherwise to become the property of the trustees. 4. The designs will be publicly exhibited for at least

two weeks prior to the decision. 5. The trustees are at liberty to reject any or all designs presented. 6. For the design possessing the highest merit in the judgment of the trustees, $1,000 will be paid; for the second, $750; for the third, $500. 7. Designs for which premiums are awarded, to become the property of the trustees. 8. The monument to be erected in Lakeview cemetery, at Cleveland, Ohio, on a commanding eminence, some 130 feet above, and about one-half a mile from the entrance to the cemetery. 9. The monument to provide a receptacle for the remains of the deceased president, and a suitable vault for his family. 10. The monument not to exceed in cost, when completed, $150,000. 11. The monument to be of granite of approved quality and color, and the emblems and statuary of bronze.

THE St. Louis Plumbers' Association have taken the right step and in the right direction in the appointment of a committee to inspect the leading work done in the city, and report on it to the association. The object in view is to expose bad work, and to discourage it as far as possible. If the carpenters', painters', masons', and all other guilds of the country, including the architects', would adopt a similar course of action, and the committees be loyal to the trust imposed, and the guilds to their committees, there would be no need of Building Inspectors, whose only observable work is drawing their salaries; for such loyalty, when dishonest work is unearthed, would make an impartial report, and, if done by a member, result in expulsion. Only let the public feel assured that a membership in any of the building guilds is a guarantee of capacity and integrity, and it will be prompt to discriminate in their favor and leave the botches to do the fitting work of conscienceless builders.

AFTER years of struggle with the pavement question in Chicago, the city authorities have come to the conclusion that the only reliable pavement is stone, and all the principal streets are being laid with this material. The favorite is granite, though medina stone is largely used, and this, because of its hardness, combined with a "grit" which the granite does not possess, we are inclined to believe to be the better for paving purposes. It is strange that so much time and money should have been expended in experimenting with pine or cedar blocks, when the eastern cities solved the problem long ago; but in this the same unwarranted ignorance has been manifest as in the use of corner catch-basins, which has made a dangerous hole at every corner, necessitating an unsightly wooden apron over the gutter; and only since we called attention to the fact that the center of the block was the proper place for catch-basins have the city street-commissioners seen their error and begun to reconstruct the street drainage, though more than twenty years ago their attention was first called to the advantages of this method. In the same way the *Mississippi Valley Lumberman and Manufacturer* calls attention to the pavements now being laid in the rapidly growing city of Minneapolis, and says: "Granite and cedar block pavement is being laid down on the principal avenues, nearly half and half, as a test. After a study of the subject for some years and a close observation of the streets of most of the cities of the continent, we cannot but pronounce in favor of the stone. We even venture to predict that twenty years from to-day there will be no more of the sap and rotten cedar blocks laid on second-common boards left in Minneapolis." Why do not those in charge learn from Chicago's and other cities' experience and put down stone at once, for this is what they will be obliged to do in the end.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART VIII.—ASSYRIA (CONTINUED).

NOTHING in Assyria has been found within one thousand years as old as the great pyramid of Egypt, nor any building as remarkable as the great temple at Karnac. Still the present civilization has derived far more from Assyria than from Egypt.

The Assyrians were an exceptional people, as full of restless intellectual activity as a Celt, reaching at everything; and although they existed for scarcely more than thirteen centuries as a nation, they found time to bequeath to the future civilizations so much that until recently was thought due to the Greeks or Romans, or to later civilizations, that Viollet Leduc speaks of Assyria as a *vast laboratory in which future civilizations were prepared.*

Fergusson divides the middle Asiatic countries during the period of their ancient greatness into three periods.

1. The ancient Babylonian or Chaldean period, ranging from B.C. 2234 to 1520, comprising the ruins of Wurka, etc., temples, tombs and private dwellings, all typical of a Turanian or Scythic race.

2. The Assyrian and second Chaldean kingdom, founded about 1290 B.C., and extending to the destruction of Babylon by Cyrus, 528 B C., comprising all the buildings of Nimroud, Koyunjik, Khorsabad, and those of the second Babylon. An architecture essentially palatial without tombs and few temples, betokening the existence of a Semitic race.

3. The Persian, commencing with Cyrus and ending with Alexander B.C. 333, comprising Passagadae, Susa, Persepolis. An architecture copied from the preceding palaces, rock tombs and small temples, Aryan it may be, but of so strangely mixed a character that it is almost impossible to distinguish it from its sister styles.

These rock-cut tombs, and the splendor of the sepulchral arrangements generally, savor strongly of Scythic blood, and their gorgeous palaces, their love of art, the splendor of their state and ceremonial,—all point to feelings far more prevalent among Turanians than to anything ever found among kings or people of an Aryan race.

None of these styles are pure or distinct one from the other. The three races always inhabited the country as they do now, and as at this hour the Turkish governor issues his edicts in Turkish, Arabic and Persian, so did Darius write the history of his reign on the rocks at Behistun in Persian, Assyrian and the old Scythic or Median tongue. To this fortunate circumstance we owe our ability to read the Cuneiform or arrow-head characters in which the Assyrian inscriptions are written. The Assyrians had about three hundred distinct characters, the Persians only about forty, and each word is separated by a peculiar sign. The Persian language nearly resembles the Sanscrit.

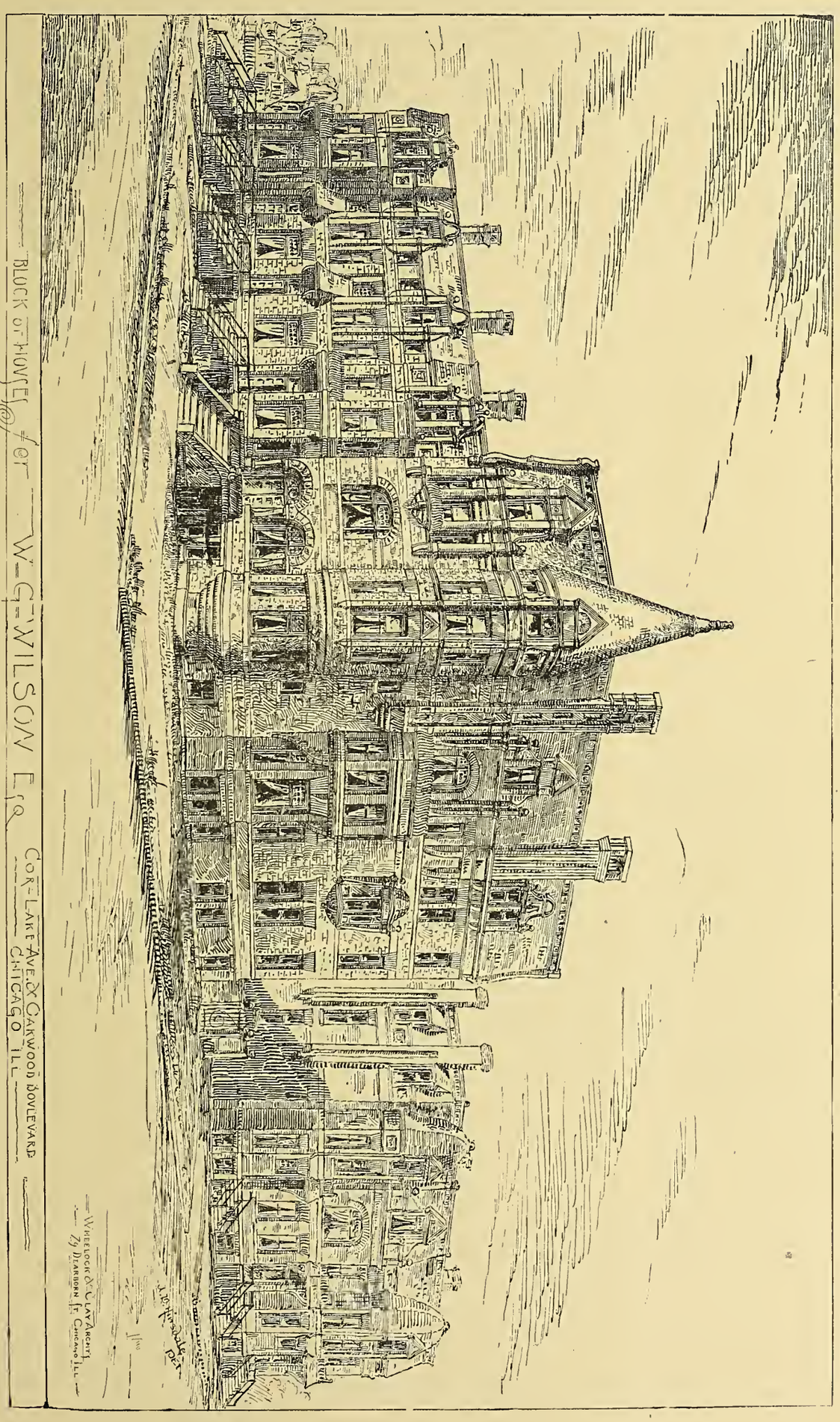
Prof. Grotefend, a learned German, by an ingenious train of reasoning and some fortunate guessing, was the first to obtain a clue to the value of the letters. Since then immense progress has been made, and now nearly every word in this Persian branch of cuneiform writing can be read with tolerable certainty.

The translation of one column greatly facilitated that of the other two. By carefully comparing proper names and other means familiar to scholars, the value of a number of Assyrian letters was soon ascertained, although from the great number of signs used—many being syllables and even whole words—and the language being then unknown, the progress was slow, but after long and persevering efforts considerable certainty in the reading has been obtained.

The Assyrian inscriptions are, in a branch of that family of languages, usually called the Semitic; that is to say, bearing a close analogy to the ancient Hebrew, Chaldee and Arabic, and it is by the help of these three languages that they have been successfully deciphered.

In the time of Daniel the Chaldee was spoken in Babylon, and was used by the Jews in their sacred writings. A corrupt dialect of this Chaldee is still spoken by the Nestorian Chaldean tribes who inhabit the mountains of Kurdistan and the neighborhood of the ruins of Ancient Nineveh.

It is not impossible that the valleys of the Tigris and the Euphrates were inhabited by man as early as the valleys of the


BLOCK OF HOUSES for W. G. WILSON Esq
COR. LAKE AVE. & OAKWOOD BOULEVARD
CHICAGO ILL
WHEELOCK & CLAY ARCHITS
79 DEARBORN St CHICAGO ILL

Nile, but as yet no record of such a people has been found. We have proof of a primitive people in France and England at a far earlier date than in Egypt or Assyria, but they have left no architecture, and only concern us as assisting in establishing chronology.

Unfortunately the works of Berosus, the only native historian of which we have any knowledge, reach us in even a more fragmentary condition than those of Manetto, the Egyptian. Berosus was a priest at Babylon about the time of Alexander. He left his native country for Greece, and was so much admired by the Athenians that they erected a statue to his memory.

The most successful attempt to restore the text which has been made is that of Herr Gutschmid, which is thought by Fergusson and others to be very near the truth. Rejecting the first dynasty of eighty-six Chaldeans and their 3,480 years as merely expressing the belief of Berosus that the country was inhabited by a Chaldean race for a very long period before the Median invasion, which event he places at 2458 B.C., with Nimrod the first King of the Third Dynasty, 2234 B.C., and ends with the conquest by the Persians under Cyrus, 538 B.C.

From this we see that the whole of the old civilization in Egypt under the pyramid-building kings had passed away before the dawn of history in Assyria or Babylonia—(Fergusson).

This kingdom, founded by Nimrod, is the great kingdom afterward known as that of Nineveh. For six centuries and a half they were the great people of Asia, and during the latter half built all those palaces which have only so recently been discovered.

About 625 B.C. the kings of Babylonia founded a second empire which lasted only 87 years, when the country is conquered by Cyrus, 538.

The first kingdom was established near the mouth of the Euphrates, and flourished there for centuries before it was superseded by the kingdom of Nineveh.

(*To be continued.*)

The Value of Type in Art.

JOHN W. ROOT.

NOTHING is more perplexing to both the artist and the layman than the status of art criticism. At present it is, for the most part, purely empirical, depending, in each instance, upon the personal whim of the critic. Many evils flow from this. Artists are not only discouraged, but also befogged, and hence do not attain as good results; but laymen, having no just basis of criticism, extend their patronage at random. Of course, there are admirable *critiques* on each branch of art, and by careful reading and observation any man may become a competent critic in any one department. But in order to accomplish this result he will be compelled to reject much that he reads, because every critic has his own opinion about each work of art, and these opinions are often contradictory. There are but few general principles confessed by every art critic, and one of these is that all art work should have in its methods special reference to natural principles. Let us look at these natural principles in a few of their manifestations, bearing in mind that Nature has within a few years received new revelation through modern science, and that the general attitude of art to science is one of at least covert hostility. The principles thus obtained from Nature we will find to underlie all good art of every sort—painting, sculpture, music, architecture, or any other.

That great natural principle which will be found most important is *Adherence to Type*. By *Adherence to Type* is meant not only natural insistence on the unity of each created object, but persistence in certain solutions of given problems. Once the theory of creation has been ascertained of any class of created beings, and it will be found that in all details it has been faithfully worked out, not fully in the individual, but entirely in the class; yet it is not on the surface alone that Nature manifests this preference for adherence to types: In structure it is more manifest. In general it will be found that once a solution of a given problem in structure is obtained, there is a manifest disinclination to solve it in a new way, provided the conditions remain the same. The various solutions of the questions vary by almost imperceptible degrees, as in the course of evolution the conditions vary. A moment's consideration of the development of the foot or hand will show the full significance of this. And what is true of structure is also true of all decorative devices, which are only structural conditions somewhat remotely removed.

Now this adherence to type is one of the best tests of every good work of art, and forms one of the most infallible bases of criticism. Of every good art work it is true that the first thing necessary is to put before one's self the conditions of the problem to be solved, and then trace the consistency of the various solutions followed by the artist. Cheap effects are so easy and so immediate in their impression on the uneducated, that any artist is constantly tempted to forego this more valuable and more subtile consistency. But this adherence to type is the enduring quality, because it includes so much. It indicates in the artist fixedness of purpose, self-command, repose, strength, profound study; in short, all the qualities of a great creative mind. One will, of course, recall a thousand great pictures, great chiefly because in every line, in every color, is manifest one indwelling purpose, and this greatness is as characteristic of small motives in art as of great ones, and can be as plainly discerned in a picture of a wayside hedge as of a Madonna.

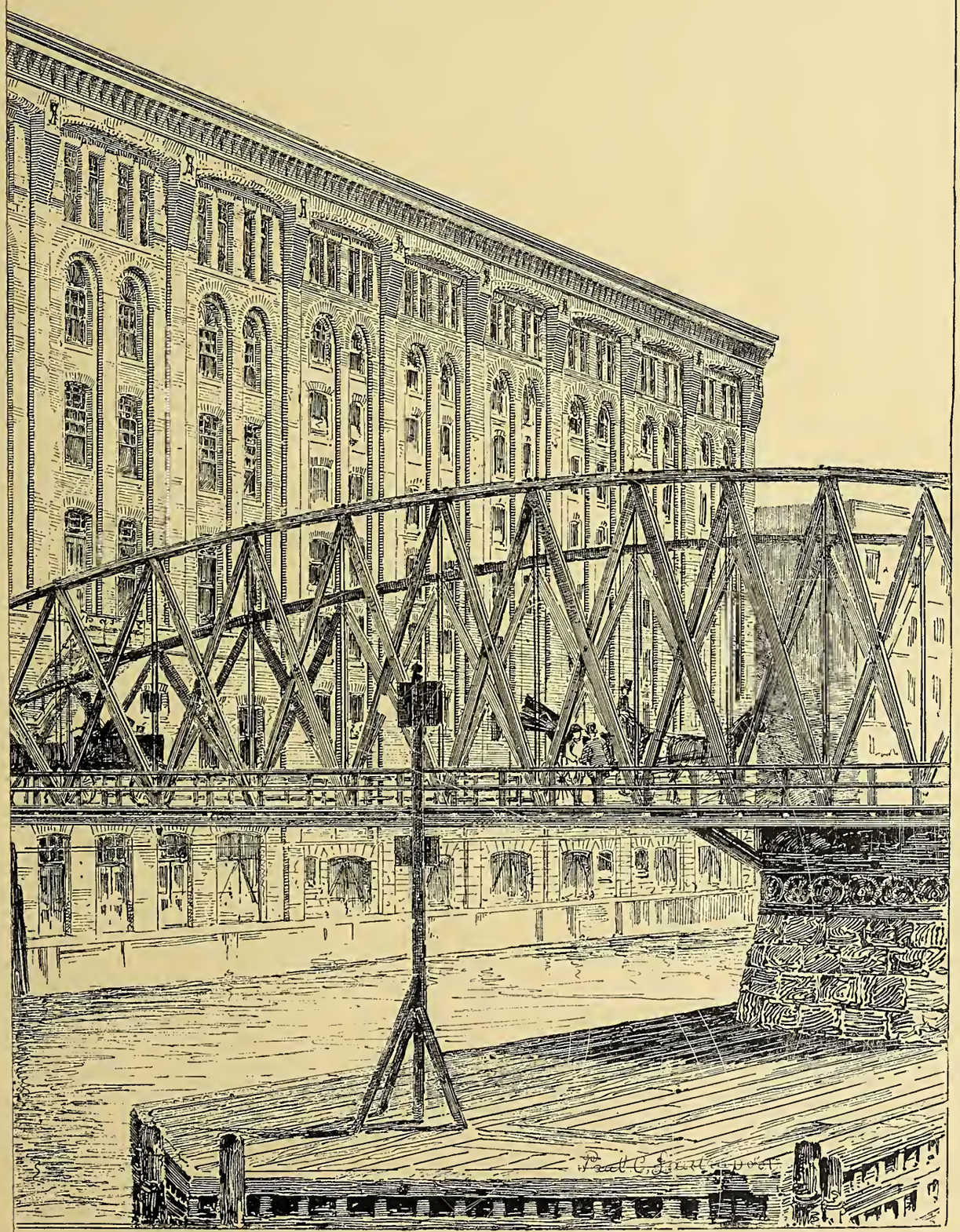
It is also characteristic of good architectural work, notwithstanding the utter neglect of it in so many modern buildings, for architecture is not an art of caprice, certainly as far as its structural conditions go. This consistency, this adherence to type, is the reason why architectural *olla-podridas* are bad, composed of bits from many periods and many styles. It is not so much that tradition and history are violated, but that type is violated. Greek and Gothic architecture are good because they are completed and perfect expressions of certain methods of structure, and are therefore typical. In music the same principal is equally important. Today there lie in uneasy graves a great host of still-born operas, oratorios and symphonies that have never lived because they belonged to no period, nation, species nor genus; while many musical works now hold the public ear because they are so *consistently* scored. In all art work precisely this test determines the difference between merit and demerit, and its application to any one of the fine arts not mentioned here will occur at once.

It will be seen that this principle applied to a work of art is valuable, not only for itself but for the qualities which it includes, and which have been suggested. The self-denial which is demanded of any artist who works according to this higher standard is very great, but self-denial is one of the essentials of all good work, and at the same time, by one of the apparent contradictions of things, is a prerequisite of the *joyousness* of art. If a man could select from every clime trees, rocks, skies and lakes, he could with ease make a most varied landscape. So, too, if he may crown a Gothic arch with a Greek pediment, and on the same level and for the same weights span his window opening with arches, beams and lintels at random, he may create a most curious building. But in neither case is the work worth the having, and in neither case will the artist get any true pleasure from his work.

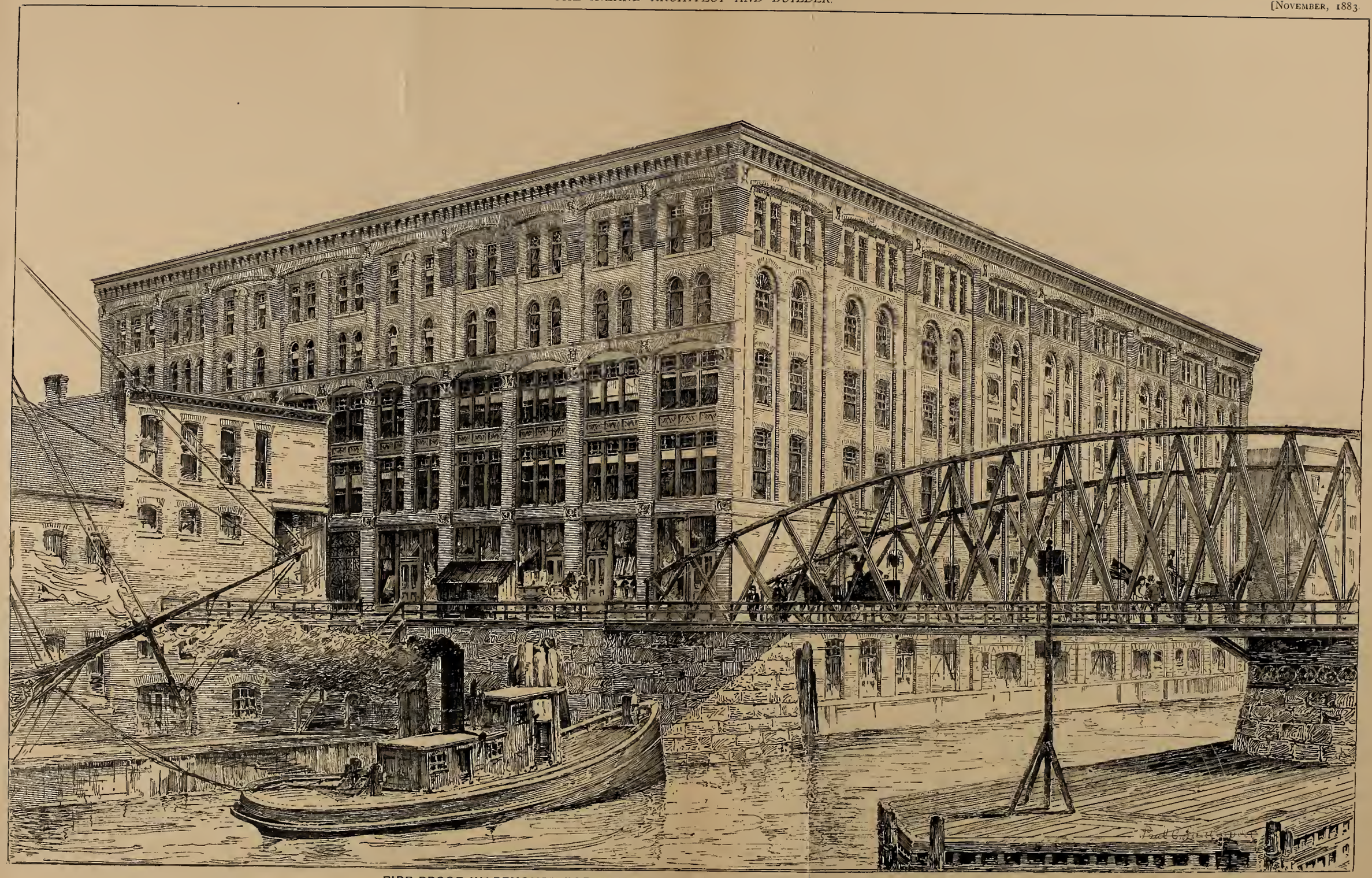
The fact is that it is public criticism which makes good art. And we have it in our own power to determine what the art of our time shall be. Criticism, once it is based on sound principles, cannot be too scrupulously exercised. It should be as swift to praise the good as to unsparingly condemn the bad. And there is no reason why the public should ever allow its judgment to be warped, and its criticism be clouded by any of the technical jargon which is so often used to bolster up bad art. A design for a house is not good because it is Queen Anne, but Queen Anne is good or bad for certain inherent reasons. Nor does the signature of a great "Impressionist" or of a great "Pre-Raphaelite" make a great picture, unless the picture be great when judged from its creator's point of view. And in all cases one of the best talismans of criticism will be found to be the jewel *consistency*.

Hanging Paper on Damp Walls.

THE Germans are utilizing a discovery for hanging paper on damp walls. It consists in coating a lining paper on one side with a solution of shellac spirit, of somewhat greater consistency than the ordinary "French polish" and then hanging it with the side thus treated to the damp wall. The paper-hanging is then performed in the usual manner with paste. Any other resin that is equally soluble in spirits may be used in place of the shellac. According to the representations, this process is found equally effective in preventing the penetration of dampness.



Edbrooke, Architect, Chicago.



FIRE-PROOF WAREHOUSE FOR HIRAM SIBLEY & Co.—George H. Edbrooke, Architect, Chicago.

The "Lady of the Lake" in Stained Glass.

THAT Western artists are becoming more truly progressive, more earnestly reaching out after that perfection that ends only with truth and fidelity to detail, with a thorough knowledge of art tradition and its demands upon all idealistic work for a guide, a desire to weave these into newer forms with newer, better, if possible, results, for a purpose, is hardly more apparent than in the line of stained glass work. The residence of John Plankinton, Esq., of Milwaukee, has been for the past year in the decorators' hands, and the writer was permitted recently to see some windows executed for the library of this mansion by the Chicago artists Messrs. McCully & Miles. The scenes, which in their selection exhibit rare taste as well as the inclination to depart from the old line of the stereotyped, are from Scott's "Lady of the Lake," and occupy the center of each window. The first is Ellen in the boat on the shore of the lake.

"In listening mood she seemed to stand,
The guardian Naiad of the strand."

This is beautifully treated, realistic and quiet in its effect, and is followed by a landscape with Ellen and the minstrel, the fair face of the girl and the aged face and gray locks of the minstrel, telling the story almost as well as the lines:

"Soothing she answered him 'Assuage,
Mine honored friend, the fears of age.'"

The hunting scene, which occupies the next window, is a spirited yet graceful rendering of the lines:

"And at her whistle, on her hand
The falcon took his favorite stand."

Entirely different in subject, yet with the same care and fidelity, is pictured the scene:

"'Seek thou the King without delay,
This signet shall secure thy way.'"

with the portrait of Scott above and his favorite staghound below, which fills the next window, while the last illustrates the beautiful closing scene of that ideal love story, fitly ending it, as all love stories should end:

"Then gently drew the glittering band,
And placed the clasp in Ellen's hand."

The drawing and coloring of the figures are excellent, and the surroundings carried out with wonderful care and fidelity to detail. Above and below each picture are panels of flowers that speak of Scottish hill and glen,—the heather, bluebells, thistle, wild rose, etc.—and through these flower groups runs the ribbon upon which are the lines describing the scene.

These windows are truly works of art, and one cannot conceive a more beautiful decoration to a room, when carried out as these scenes are, the rich draperies and delicate flesh-tints of the figures, the natural treatment of the flowers on the varied antique glass, each framed in a border of jewels and deep-colored opalescent glass, making pictures enduring and ever pleasing.

Architectural and Building Notes.

T. C. GOUDIE is building a chapel at the Forest Home Cemetery which is unique in design and will greatly ornament that new burialplace. It is of pressed brick, with cut stone caps, pilasters, buttresses, etc.

THE corner-stone of the new court-house of Porter county, Ind., designed by Architect J. C. Cochrane, of Chicago, was laid at Valparaiso, on the 24th ult. There was a large attendance of the municipal authorities at the ceremony.

ARCHITECTS BAUER & HILL have plans for Mr. John Gunter, who will build on Wells street, between Superior and Huron, a three-story and basement flat building, with front of pressed brick and Berlin stone trimmings, at a cost of $8,000.

ARCHITECT J. M. VAN OSDEL has completed plans for an office-building for J. D. Parker, six-story, 50 by 100 feet, first story of McArthur brown-stone, upper stories faced with Anderson pressed brick. The building will be thoroughly fireproofed by the Ottawa Tile Company; cost, $100,000.

A PISTON packing expander, with several points of superior merit, is called the Williams, and is handled by H. A. Allyn & Co., of Chicago. It reduces the friction to the lowest possible point, will respond readily to any irregularities in the cylinder, it balances perfectly the piston head, is self-adjusting under all circumstances, and its symplicity of construction makes it in lasting quality especially valuable.

MR. B. R. HAWLEY is introducing into the elegant residence being constructed on Eighteenth street and Michigan avenue for Mr. Selz, of Selz, Swab & Co., by architects Adler & Sullivan, his improved construction, floor-warming, heating by hot air radiators, and also his laundry dryer, all of which are meeting with the commendation of leading architects because of their practical utility and value.

THE following placard has been posted in the plumbers' offices:

FELLOW TRADESMAN—Dear Sir: At a meeting of the Master Plumbers' Association of this city, held September 19, 1883, it was resolved that all applicants for license be required to come before the License Committee, composed as follows: Edward E. Baggot, J. J. Wade, Thomas C. Boyd.

The object of this is to prevent men from getting licenses as master plumbers who are unworthy and incompetent.

Please do not sign any applications for license, but refer them to

EDWARD E. BAGGOT, Chairman.

THE Wight Fireproofing Company have been awarded the contract for fireproofing the new Board of Trade building, Chicago. The contract is an extensive one, and will amount to $44,000. This company also have contracts for the plastering of the new New York Life Insurance building in New York, and are about to commence the fireproofing of the general offices of the Atchison, Topeka & Santa Fe Railway Company, now being erected at Topeka, Kansas.

ARCHITECT ALFRED SMITH has planned a block of substantial stores and flats on Ogden avenue for ex-Sheriff Hoffman. It will have a stone front, will be three-stories high, and contain five stores and ten flats, and will cost $23,000; also for C. H. Slack, on West Adams street, near Throop, the remodeling of a brick house, at a cost of $5,000; also a block of flats on Illinois street, near State, for W. M. Hoyt. It will be of pressed brick, with stone front trimmings. It will be four stories and a basement, 50 by 50 feet, and will cost $18,000.

ARCHITECTS BURNHAM & ROOT have drawn plans for a residence for Mr. Joseph Frank, to be erected on Michigan avenue, between Thirty-third and Thirty-fourth streets. It will be two stories, basement and high roof, and will have a front of Anderson's pressed brick, trimmed with brown-stone. The size will be 46 by 75 feet. It will be finished throughout in hard woods; also a picturesque country house for Mr. G. W. Smith, at Evanston. It will be 40 by 60 feet and two stories high, with steep roof. The exterior will be of pressed brick and timber.

THERE is soon to be started at Galewood, a station on the Milwaukee and St. Paul road about seven miles from the city, one of the most important industries that have been undertaken about Chicago for a number of years in the shape of what will be known as the Western Brick and Tile Manufacturing Company. The machinery the company now has up is capable of manufacturing 50,000,000 brick per year, and Mr. Gregg, who is the inventor of the machines to be used and one of the main movers in the enterprise, says the capacity will be doubled by the end of another year.

A LATE invention in wood flooring has recently been produced in this city at Bournique's new South Side Dancing Academy, it being the "patented lead-joined, end-up, hardwood mosaic," manufactured by W. C. Runyan & Co., of Rochester. The floor contains 175,000 pieces, each piece being one and three-quarter inches square, grooved on each side and joined with lead tongues, the lead being forced in in a molten condition. The body of the floor is maple, the border of ebony and cherry, the whole producing a very handsome effect, and is, undoubtedly, the most durable floor laid in this city.

A. C. HICKEY, of Chicago, has for some years past been making a reputation among theater architects and owners by the superior excellence of his sunburner for auditoriums and his system for the arrangement of the gas pipes and stage fittings. Mr. Hickey has made this branch of gas-fitting a close study, and its success is noticeable in the majority of Western theaters and even in the East. The new house at Rochester, N. Y., for instance, and the fitting of the Grand Opera House at St. Paul, as well as that at Duluth, lately opened, are the latest examples of this plan of theater lighting. The system has proved its worth and deserves success.

ARCHITECT HALLBERG has made plans and let contracts for a residence for Mr. P. E. Wilson, on Warren avenue, near Hoyne. It will be two stories, attic and cellar high, and will have a basement of rock-faced brown-stone, and a front of Anderson pressed brick. It will have a projecting bay in the front, running from the basement to the roof and terminating in a gable. In each story there will be a mullioned window, with headlight of colored cathedral glass. Over the front entrance, which is to the left of the bay, will be a graceful canopy of wood, with a balcony surrounded by ornamental iron. The parlors, library, dining-room and kitchen will be on the first floor.

THE Lyceum Theater, belonging to Joseph Downey, the well-known Chicago contractor, recently destroyed by fire, is being rapidly rebuilt by Architect George A. Masters. It is being enlarged, will have a handsome front five stories high and contain two galleries. Many special features will be introduced by the architect, especially for acoustics and ventilation, which will be, in a way, experimental, as they never before have been used in theaters. A commendable feature are the very broad stairways leading direct from the street to the main floor and balcony. Ample exits are also provided, and when completed it will rank among the first theaters of the city in architectural construction.

ARCHITECT WODSKIER is constructing an apartment house for C. B. King, corner La Salle Ave. and Superior street. The ground covered is 75 by 106 feet, and the building will be three stories and basement in height, and contain twelve apartments. The fronts will be of pressed brick with rock-faced brown-stone basement. The cost is estimated at $40,000. This architect is also constructing an apartment house similar in general style and material for Mr. Z. S. Ely, of New York, on Wells street, between Oak and Wendel streets. It is 80 by 70 feet, and will cost about $30,000. This architect is also preparing plans for the proposed building on Jackson and Market streets for the boot and shoe firm of C. M. Henderson & Co., but as the contracts will not be let till after the first of the year, nothing definite can be said about the plans, especially as no proposed building becomes a fact until the contracts are let and the owner knows exactly what it is going to cost.

ARCHITECT W. L. B. JENNEY has planned an extensive addition to the Presbyterian Theological Seminary of the Northwest. The dimensions of the new building are 130 by 45 feet, four stories and basement in height, the material being brick with stone trimmings, with slate roof. The structure will be practically fire-proof, the floors and walls will be deadened and mere lath used in the partitions. The style is modern Gothic, and the sky-line and front presentation are handled with great variety, an effect that is brightened by circling window-heads and pointed arches and lintels. The entrance will be massive and entirely marble. There will be fifty dormitories, each dormitory including a bedroom with closets, and a fireplace in each study. On the first floor at one end is a large parlor, 19 by 43 feet, and both ends are agreeably broken up by, in the one case, a bow window and, in the other, a large triple opening. There are fire escapes at each end. The building will be heated by steam. No estimate has been made of the cost, but the improvement will be commenced immediately.

Our Illustrations.

Page 135, Lake Presbyterian church, Chicago, Ill., B. J. Bartlett & Sons, architects, Des Moines, Iowa. The church is to be built of Anderson pressed brick with stone trimmings, and, though 70 by 103 feet, will cost but $15,000. It will he a model church in this respect, as it is understood that several prominent contractors estimated that the lowest possible figure it could be constructed for would be $18,000. The design is singularly adapted to the economizing of space. J. H. Crumby is the contractor.

Page 131, Block of houses corner Lake avenue and Oakwood boulevard, Chicago, for John M. Wilson, by Wheelock & Clay, architects. This notable improvement was first projected early in the spring, the design being to construct a first-class apartment building. The plans were finally changed and residences substituted. There is one hundred and fifteen and one-half feet on Lake avenue and two hundred feet on Oakwood boulevard. The material of the fronts is green-stone from quarries located near Philadelphia, with brick and terra-cotta trimmings. The general style is what passes for Queene Anne, an adaptation of old English to Americanized forms. The corner house, which will be occupied by Mr. Wilson, is four stories, with slated mansard roof and trimmings of galvanized iron. It will contain about eighteen rooms and be fitted with bath-rooms, closets, etc., on each floor, and will be finished in hard woods. The houses adjoining on Lake avenue are six in number, three stories high, and each 20 by 58 feet. The buildings on Oakwood boulevard are similar in size and architecture. Each contains twelve rooms, the kitchen and laundry being in the basement. All the outside steps are of stone. These houses in their construction will meet the requirements of an elegant and comfortable home, and as the location is one of the most desirable the city affords, they will be a colony of homes for some of Chicago's best citizens. The estimated cost of the improvement is $100,000.

A Fireproof warehouse for Hiram Sibley & Company, by George H. Edbrooke, architect. This great warehouse now in course of construction will be one of the finest, as well as the largest, in the city of Chicago. It has a frontage on Clark street of 189 feet by 240 feet deep (or river front of 240 feet). The river front is to be nine stories high, the Clark street front seven stories, with basement and sub-basement. The whole construction is to be entirely fireproof. The exterior all to be faced with Addison pressed brick, with cut-stone details. The front on Clark street is planned for stores of the most modern design, with large plate-glass windows, stained glass transoms, light iron divisions for the doors, and iron girders spanning each store-front. Above the stores, the several floors are to be used for the general offices of Hiram Sibley & Co., the north 60 feet of first floor to be elaborately fitted up. Immediately back of the portion used for offices is the great warehouse, nine stories high, each floor estimated in the construction to hold a weight of five hundred pounds per foot. In estimating such a weight as before-mentioned for the full nine stories, few would imagine the great weight the footings or foundations would have to sustain. On the river front piles are driven. The other piers or walls come on the natural earth. In looking at the foundation plan the footings of piers or walls seem to nearly cover the whole area. Mr. Edbrooke has carefully estimated every pound as near as possible, and has proportioned the base or bearing accordingly, as well as the supports above, columns, girders, etc., to the roof. The river front is 240 feet long by nine stories high, and the magnitude can only be imagined by perhaps comparing the height of the Montauk Block for the elevation, and three times its front for the river front. The design of the river front is somewhat plainer in style than the Clark street front, but it has a grandeur and solid repose about it that is not surpassed by any building in this city. The long, broad pilasters starting from the basement-story and terminating in arches at the top, seem to increase the apparent height. The architect has taken advantage of this and made the principal lines in the design perpendicular, which is highly satisfactory and far more effective than to have used horizontal string-courses to diminish the height. The openings generally are arched. The cornice is all to be of brick, with stone capping. No terra-cotta will be used. The whole exterior to be of pressed brick and cut stone. This warehouse, which has been constructed to accommodate the mammoth Western seed business of this house, and as a branch it is beyond question a phenomenal illustration of the business done by some of our large mercantile firms, and will be a monument to Hiram Sibley & Co., and a giant among the many large buildings of Chicago as well as a magnificent architectural production. The cost when completed will be $500,000.

Asphalt Mortar.

A GERMAN periodical devoted to architecture, the *Centrablatt der Bauverwaltung*, describes a patented waterproof composition for wall copings, water-tables, etc., made at a factory in Stargard, Pomerania, which has been used with great success for a number of years on the Berlin-Stettin railway. The material is composed of coal tar, to which are added clay, asphalt, resin, litharge and sand. The tenacity of this mortar, when properly laid, and its freedom from liability to damage by the weather is fully illustrated in the coping of a retaining wall on the above-named road, which has been exposed four years to the drainage of a slope thirty-three feet high, which is still perfectly sound and has not had any repair since it was laid down. In applying this mortar the space to be covered is first thoroughly dried, and after being well cleaned is primed with hot roofing varnish, the basis of which is also tar. The mortar is then laid on cold to the thickness of about three-eighths of an inch with either wood or steel trowels, and is properly smoothed over. If the area covered is large, another coating of the varnish is applied and rough sand strewn over the whole. The waterproof surface thus made is perfectly impregnable to rain or frost, and practicably indestructible. The inexpensiveness of this material and its characteristics will suggest many uses it may be put to in ordinary building where there are water annoyances to be overcome.

Basement Ventilation.

THE Chicago basements in business blocks have always been a source of discomfort and even danger to those who have been obliged to work under the line of the street. The general plan in wholesale and retail stores has been to have work rooms, packing rooms, as well as the closets of the establishment, under the store floor, extending under the sidewalks to the street wall. In drygoods and millinery establishments, thousands of women and girls are employed where they are thoroughly shut in from the light of day, and beyond the reach of pure air. The drygoods firm of Mandel Bros. have lately spent $100,000 in enlarging and remodeling their store on State street, under the direction of Architect Addison, and the result is a store that in all important particulars is a model of its kind. Around the elevators, which are of W. E. Hale's patent, is a specimen of brass manipulation, designed and manufactured by L. S. Baldwin & Co., which has never been equaled here. The interior woodwork and arrangement of departments calls for admiration, but it is the arrangement, and especially the ventilation of the basement, which is most commendable, in that, though the system is for the first time introduced into a store building, is simply perfect in its action. The plan is a double system of galvanized iron pipes leading from fans run by the elevator and electric-light engines. One system evenly and effectually distributes air to every part, while the other draws the air away, collecting it near the closets, thus preventing the spreading of impure air, and ejects it from a flue which rises twenty-five feet above the roof. The result is that with the admirable light furnished by the Edison Electric Light Co. the basement, with its ladies' toilet rooms and the general shipping department of the house is as pleasant, as free from all odors, as if on upper floor. The system is the invention of B. R. Hawley, of Hawley's system of ventilation, who for years has labored for its perfection, and who is to be congratulated upon its perfect success. It should be introduced as a sanitary measure into all store buildings, as its action is so perfect that even where the thirty closets are grouped in this basement, a smell is not perceptible. Mr. Marshall Field was heard to congratulate Mr. Mandel upon possessing a store of unequaled arrangement, a commendation that is certainly well merited by this enterprising merchant.

A New York Apartment House.

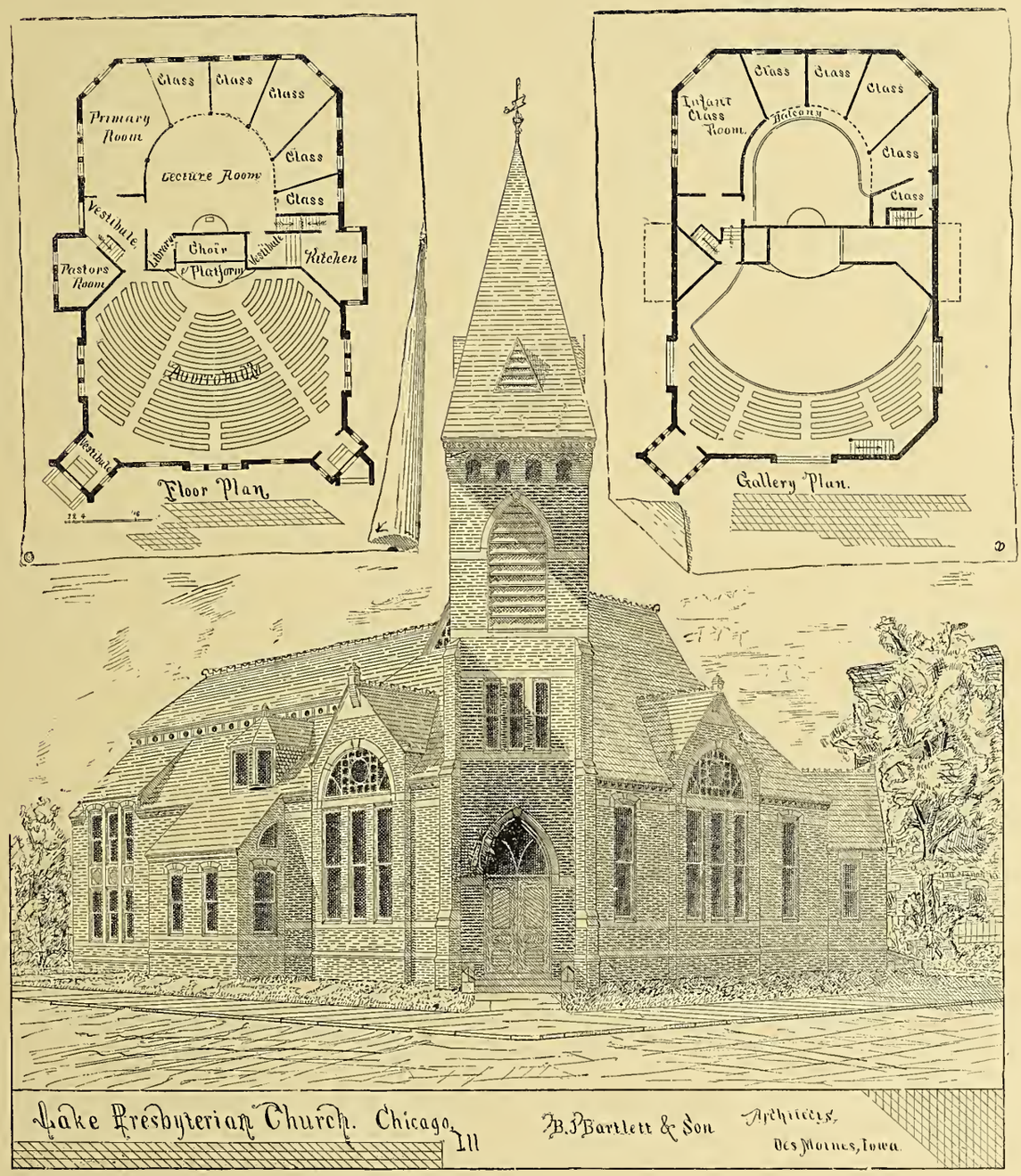
OF the fine apartment houses that are being erected in New York city, the Kenmore, as we glean from the *Real Estate Journal*, furnishes a good illustration of the class. The site, Boulevard street (57th), between Eighth and Ninth avenues, affords a fine view of its handsome elevation of seven stories of brick and stone, richly trimmed with terra-cotta. The entrance presents an oriental magnificence. The outer door is composed mainly of the finest beveled glass, while the inner door is of cathedral glass, unique in design. On the first floor there are two suites of apartments and a richly fitted up reception-room, with a clerk always in attendance, and where the inmates can at all hours have the use of the telephone and district telegraph call. On each of the six floors above there are three suites of apartments, every room having ample and direct communication with the exterior air. The house throughout is trimmed with well-selected hard wood, and each apartment is superbly decorated and papered in many different designs. In the halls lincrusta walton has been used and produces charming effects. Two passenger elevators are ever ready for the use of tenants and visitors. In short, nothing seemingly seems to have been neglected by Messrs. Terrance, Farley & Son, the builders and owners, that could add to the convenience or elegance of the premises, and who constantly superintended its growth from foundation to coping.

Ash Mortar.

A MR. SHINN, of Philadelphia, has obtained a patent for the use of ashes in making mortar. It has heen found that the mixing of fine domestic ashes with a small proportion of lime, forms a mortar, when a month old, that has a tensile strength of from four to five times that made from common sand and lime. Sand and mortar, a month old, has a tensile strength of twenty pounds, while ashes and lime, mixed as beton, gives a tensile strength of 140 pounds and a crushing strength of over 1,100 pounds per square inch. It is said, owing to the small quantity of lime (10 per cent) required for this mortar, it is necessary to mix it by machinery at a mill and have it delivered ready for use. Ash mortar is credited with the additional advantages of resisting the action of water as soon as it has set (in from two to three days), and also the combined action of fire and water, the quantity of lime being so small and the chemical union of the ash so complete, heat does not produce free oxide of lime, as in the case of sand mortar, consequently does not swell when the water is applied to it in the heated condition. The weight of the mortar is about one-half that of sand mortar. In setting it forms a silicate of lime and alumina, and hardens uniformly throughout; while sand mortar, when set, forms but an imperfect carbonate of lime. The ash mortar is said to work soft and smooth. Ashes from under a boiler or other furnaces where a high degree of heat is maintained, are not suitable for the purpose, it having been found that such ashes have no affinity for lime.

An Important Decision.

A LENGTHY and bitter litigation, which has been going on in the Patent Courts with regard to the rights of Stewart Hartshorn and other claimants over the devices of stop-rollers for window shades, has come to an end. Hartshorn claimed his patents covered the principle of the stop-rollers which were being manufactured by opposing patentees, and his claim was sustained in the lower courts, the defendants being declared infringers. The Eagle Shade Roller Co., of Boston, carried the case to the U. S. Supreme Court, which came before Judge Lowell, who, October 12, affirmed the decision of the courts below, leaving Hartshorn the victor and in virtual control of the whole field.


Class
Class
Class
Primary Room
Class
Lecture Room
Class
Vestibule
Library
Choir
Platform
Vestibule
Kitchen
Pastors Room
Auditorium
Vestibule
Floor Plan
Infant Class Room.
Class
Class
Class
Balcony
Class
Class
Gallery Plan.
Lake Presbyterian Church. Chicago, Ill
B. F. Bartlett & Son Architects
Des Moines, Iowa.

Art Notes.

THE Boston Museum exhibits a score of oil sketches of the Franciscan missions, and ruins of missions on the Pacific coast.

THE second annual exhibition of Artists' Sketches and Studies will open at the American Art Gallery, on November 15, and continue one month.

FOR many purposes of decoration and utility metals are becoming exceedingly popular, and where they are not available metallic effects are ought for.

THE Grosvenor Gallery, of London, has agreed to exhibit a collection from the Society of American Artists of New York, during the months of September and October, 1884.

FREDERIC AUGUSTE BARTHOLDI, the sculptor, is about fifty years old. He was a pupil of the famous Ary Scheffer, and one of the French Commissioners at the Centennial Exhibition at Philadelphia, in 1876.

THE Berthold Auerbach monument, to be erected in the Black Forest, is to consist of a large block of granite with a bronze medallion of the poet, and will be placed in the vicinity of the Kupfermhammer, near Pforzheim.

A CURIOUS set of furniture, in which the hide, horns, forelocks and fetlocks of Hungarian steers were variously utilized, was exhibited recently by one of our art firms; the silken locks became fringes, the polished horns arms and legs, while the hide formed a very ornamental upholstering, with its silver-gray and black hair.

MR JOHN J. MCGRATH is redecorating the entire interior of Mr. Thos. Lowry's house, of Minneapolis; Mr. Ed. Sanderson's house, of Milwaukee; C. B. Miller's house, Los Angeles, Cal.; and Mr. D. R. Moon's house, of Eau Claire, Wis.; besides the usual extensive number of city residences, with frescoing and wall-papers.

THE Princess Elizabeth of Millais' picture was the daughter of Charles I and Henrietta Maria. Her life was a very sad and lonely one, owing to imprisonment and ill-health, and she died, at fifteen years of age, at Carisbrooke Castle, seeming to pine away, but supposed by some to have been the victim of slow poison administered by Cromwell.

MESSRS. ROSENBERG AND FIELD, the artists, have returned from a summer spent in Brittany and England, and have taken a studio in the Ayer building, corner State and Monroe streets. They have brought back a large number of sketches and finished pictures, many of them of peculiar excellence in the selection of subjects as well as artistic execution.

MR. JOHN W. ROOT has designed a set of wall-paper decorations for Mr. John J. McGrath comprising a dado and border, a wall-paper and frieze. The work is characteristic, bold and artistic, fully up to the efforts of the two firms concerned, and will make a valuable addition to Mr. McGrath's large collection of private patterns. The colorations are by Mr. Twyman and Mr. Root.

VERY effective as a window decoration and useful as ventilators are shades composed of Vedder's rings set in a brass frame. These rings, joined in rows by small brass links, are stained variously of a pale green or blue, amber and wine color, are about a quarter of an inch thick and an inch and a half in diameter. When the sash is lifted or let down they allow of a clear passage of air and light while affording a picturesque protection from outside view.

How to Take Screws out of Woodwork.

CARPENTERS, cabinetmakers, and artisans in wood generally, often encounter a difficulty in withdrawing a screw from work, by the screw turning around under the application of the driver, and refusing to come out of its place. In such a case the screw may have been driven nearly home originally by a hammer instead of with a driver, and hence no regular corresponding thread been formed in the wood. In other cases the screw may have been properly driven with a driver, yet being in old work the thread may have oxidized from the screw, or the wood about the thread may have decomposed so as to leave the thread of the screw without a matrix. Under either of these circumstances it becomes necessary to wrench off hinges and parts fastened by the screws, and oftentimes to the great injury of the woodwork so assailed and always with that risk. The London *Builder* offers a simple way out of this difficulty, viz: The application of heat to the head of the screw, which may be done with a heated poker or some such instrument. A few moments of such application of heat will render the withdrawal of such a contrary screw as easy a matter with a driver as if it had been recently and properly driven. The *Builder* suggests in driving screws that their tips be dipped in oil in order to defer rusting or oxidization.

A New Roofing Material.

A MANSFIELD, Ohio, company is manufacturing a novel paper roofing material, which, it is claimed, is the best roofing in the world, all things considered. It is made from wood-pulp board, consisting of two-thirds spruce and one-third poplar. It is alleged it is not affected by heat or cold as metallic roofs are, nor can it corrode; that it is much lighter than slate, weighing only about fifty pounds to the square, and can be walked on without injury; that it is practically fireproof, though not absolutely non-combustible. Among other desirable qualities it is said to possess are its flexibility, which admits of its being used for valleys, flushings, ornamental cut-work in gables, panels, bay windows, verandas, and irregular shaped roofs. It can be used on any kind of a roof not less than 1½ inch fall to the foot. It is claimed for it that it can also be used with perfect success for sheathing warehouses and grain elevators.

Lumber Notes.

ARKANSAS, Texas and Louisiana are said to have 190,000,000,000 feet of yellow pine.

AT Manistee, Mich., recently, R. G. Peters & Co. sold to Ed. Buckley 35,000,000 feet of standing pine timber for $100,000 cash.

MANISTEE, Mich., has exported this year up to September 1, according to the Custom House books, 115,004,000 feet of lumber, 367,809,000 shingles, 10,038,000 lath, and 5,705,000 cubic feet of timber.

ACCORDING to the statement of the Export Lumber Company of New York, there has been exported of white pine from that port: for July, 6,402,000 feet; for August, 5,160,000 feet; for September, 3,582,000 feet; from July 1 to October 1, 45,796,000 feet, or 4,700,000 more than for the same period in 1882.

THE Bay City, Mich., *Gazette* records the letting of a contract to McMullen & Co., who have agreed thereby to put 40,000,000 feet of pine in the river Tahquamenow, in the upper peninsula, for an Indiana concern which has recently purchased large tracts of timber and contemplates erecting extensive mills in that vicinity.

THE Bay City *Lumberman* says, "Notes of busy preparation for the woods are being heard thus early from nearly every direction," which would seem to indicate that, notwithstanding the talked-of curtailment of lumber operations this winter, the slaughter of pines will be governed more by the character of the weather conditions than the declarations of men.

A RECENT statement shows there are engaged in getting out and manufacturing lumber in Canada about 100,000 men who support families, forming a grand total of 500,000, or about one-ninth of the population of the dominion. In sawmills and machinery, $25,000,000 is invested, and in land and lumbering outfits about $50,000,000, or more than one-third of the amount invested in all the other industrial establishments.

AT the mouth of the Chippewa river, at Beef Slough, on the Mississippi river, where 400,000,000 feet of logs have been rafted for lumbermen at points below, the water is so low the towboats are unable to approach the slough. Twenty-five million feet were sluiced from Paint Creek dam last week, to be floated into the works, and the Beef Slough Company has upward of 100,000,000 feet hung up they are anxious to get out before the season closes.

Interior Decoration.

ONE of the latest styles shown in grates and mantels is a mantel and mirror frame of unpolished ash and bevel plate mirror. Around the grate are grouped appropriate designs in tiling. A wide ornamental fender of polished brass surrounds the grate and uniquely designed andirons in old brass are prominent. A simple method for covering the front of the grate when not in use is introduced by the F. A. Butler company, to whose courtesy we owe this information. This is to suspend a plush or velvet curtain upon a brass rod and rings. The curtain may be embroidered to suit the fancy and be as decorative as it is useful.

A new grate is exhibited which, because of its completeness, will be largely adopted where utility is desired in combination with artistic effect. The grate frame is made of polished iron and is high enough to admit of an ornamented plate above the grate, which also serves to conceal a flat "curtain," which, being lowered before the grate, serves as a blower; the front of the ash-pan is also movable and can be raised, and joining with the blower also serves to increase the draft. The grate is hung so that it can be readily emptied and the whole is completed by a draft damper which is operated by an ornamented knob in front. This grate can be fitted to any mantel and looks well in an unpolished ash mantel with tiling around the grate. The sample shown was modeled by Elihu Vedder.

An Architectural Relic.

THE *London Times* reports an interesting piece of almost premediæval architecture was brought to light at Würzburg a few days ago. In the process of enlarging a shop the workmen came upon a considerable portion of an old cloister which had been partly built up into modern walls, and which presented, when cleared of all excrescences, many features of great beauty. Careful comparison satisfied the local architects that it was older than the church, still standing, built by Bishop Henry in the year 1000, and it must have been an appendage to the "new minster" of St. Saviour, built about 746, and destroyed by lightning in 854, in the course of a terrific storm which swept over all southwestern Germany with such violence that people thought the end of the world was at hand. The proprietor of the place has handed the remains over to the architect of Würzburg cathedral, Herr Friedreich, with instructions to clear the whole space around, so as to allow this monument of the earliest middle age to be studied by all lovers of art. Romanesque pillars of singular elegance alternate with clusters of slender shafts, all bearing small round arches. The whole is of striking beauty. The capitals are quaintly sculptured, and some of the pillars have carvings in relief. It is pretty certain that this is one of the oldest, if not the oldest, piece of Romanesque architecture in Germany. Walter von der Vogelweide, the celebrated German mediæval poet, was a canon of Würzburg about the year 1230, and probably often traversed this cloister. In the exploration of the site, which was at once carried out, a stone sarcophagus was found close to the spot where it is recorded that he was buried. In it were some fragments of a skeleton. Time had effaced whatever inscription the lid once bore, and there was nothing within to identify the tenant. Imagination at once declared these bones to be the remains of the famous Minnesinger. But a scientific examination decided that some of them belonged to a young man, some to an old man; even some skull fragments were shown not to have been portions of the same skull.

New Publications.

ROUGH SKETCHES FROM NATURE. Price $5. Published by J. O'KANE, 4 College Place, New York.

The object of this work, to afford suggestions and study for the designer, is prepared under a method of treatment of the subject which the author may be congratulated upon. In the fifty plates that comprise the series, beside the customary and indispensible groups of lilies, passion flowers, fox-gloves, poppies, etc., he has very successfully handled more difficult subjects, such as orchids, laburnums, ferns, etc. The effects which may be derived from the harmonious mingling of several species in one group is admirably shown in a number of plates, notably Nos. 1, 31, 40 and 41. Everywhere there is to be seen a careful accuracy of delineation, a truthfulness of shading and veining of the foliage, and such graphic and faithful rendering of plant physiognomy as to command praise. Mr. Ryan is to be congratulated on the results which must attend this happy venture.

THE INLAND PRINTER, an operative journal conducted by workmen. Published monthly by the Inland Printer Company.

The publication of this journal opens a new branch of journalism in the West, though in a few cases it has been practiced in the East, namely, the publication of a trade paper by operatives, and the effort deserves success, for no line of work so surely requires an exponent as this, "the art preservative of arts." The *Inland Printer* is full of practical suggestions and news matter relating to the work of the printing craft, and in typographical appearance is all that the most thorough knowledge of the business can produce, and shows, to use a pun, on its "face" that its proprietors are practical men, and their production fitly represents them in every way. We hope to see it flourish, and even reach that degree of prosperity and fame enjoyed by its celebrated prototype the operative journal published by the Lowell mill operatives in Massachusetts.

THE AMERICAN JOURNALIST.

The second number, bearing date October 15, of an attractive monthly bearing this title, and published at St. Louis, has reached us. As may be inferred from the title, the object of the publication is to furnish a medium of intercourse between the journalists of the country and to draw them closer together. If the object is not attained, it evidently will be through no fault of the editor or the "chirrupy" quality of its contributions — judging from this second number. We not only wish the venture may be a success, but will say the honor of the profession cannot afford to let it be anything else. The following is the table of contents of the October number: "Illustrated Journalism," by E. J. Biddle; "Reporting in New York — Hard Lines," by Stanley Huntley; "Chicago Journalism — Some Earthquakes," by Chas. D. Wright; "Dramatic Critics," by John J. Jennings; "Wm. F. Switzler, with portrait"; "The Chicago *Herald* Trouble"; "Papers Edited by Educated Mutes"; "Editorial Notes"; "Newspaper Notes, by States"; "National Editorial Directory."

A PRACTICAL TREATISE ON LIGHTNING PROTECTION. By HENRY W. SPANG, with illustrations. New and Revised edition. New York: D. Van NOSTRAND, 23 Nassau and 27 Warren streets. Price 75c.

This little work treats of the subject of lightning protection in a popular manner. The author, after a few introductory remarks, takes up the discussion of electricity, and explains the meaning of various technical terms, treating on electrical induction, formation of thunder clouds and storms, height of thunder clouds and area of storms, electrical induction during a storm, atmospheric electrical discharges, lightning and thunder, accumulation of electricity in the subterranean water-bed, action of electricity of air and earth during a lightning discharge, the path selected by a lightning discharge, the origin and function of lightning-rods, under which division metal roofings, leaden pipes, gas and water pipes are discussed, with a list of the best materials for use as lightning conductors. What he terms the radical system of lightning conductors is explained. His system of ground connection seems philosophical, and his theory of air terminals is supported by arguments that are strong in its favor. In a word, this little work is a valuable addition to the literature on this subject.

Buildings That Resist Earthquakes.

THE volcanic eruptions in Java, the earthquake in Ischia, the liability of earthquakes on the Pacific coast, and our own Western tornadoes has called attention to the methods of construction of buildings in Japan, where shocks of earthquakes are frequent. It is not the custom in that country to dig foundations for any building, no matter how large or important it may be. Rocks slightly rounded at the top are placed where the four corners of the house are to be. The corner posts, also rounded at the end, rest on these. The timbers are all pinned together, not nailed, so as to allow of considerable movement without coming apart. In the central portion of the building the timbers are particularly heavy, and act as ballast. In high towers there are sometimes huge beams swung from the roof and reaching to within a foot of the ground, which prevent the building from being overturned either by earthquake or storm. The oldest building in Japan, the Treasury at Nara, is built in this manner, without the swinging beam, but with a very heavy ballast in the framework of the center of the floor.

A New California Resort.

W. E. WILLMORE, of Los Angeles, California, is in Chicago, and exhibits plans of a seaside resort which is being built for him by architect W. R. Norton, of Los Angeles, at Willmore city, on San Pedro bay, a beautiful inlet from the Pacific ocean, three miles east of Wilmington. The pavilion, which is 400 feet long, and varies in width from 40 to 65 feet, is designed in three stories, the upper to include the pavilion, promenade, etc.; the second floor is laid out in refreshment, dining and sleeping rooms, while the lower floor will be devoted to bathhouses. The structure is located on a bluff 25 feet above the beach, which is very wide and of hard fine sand. The convenient arrangement of this building, and its location, will make it a valuable addition to California seaside resorts.

Inventive Genius in Building.

286,176. Fireplace Grate. Albert Chase, Boston, Mass.
286,224. Fastener for the meeting-rails of sashes. George W. Reeve, Milburn, N. J.
286,234. Lumber Drier. John Owen Smith, Jamison, Ala.
286,250. Reversible store-door latch. August Arens, New Britain, Conn.
286,255. Roofing Paint. Mead Blake, Compton, Quebec, Can.
286,270 Overflow connection for bath-tubs. Allen P. Creque, New York, N. Y.
286,321. Pavement and floor. Elijah B. Martindale, Indianapolis, Ind.
286,345. Vise. George Thorp, South Bay City, Mich.
286,365. Spring-compression Faucet. Joseph Zane, Boston, Mass.
286,376. Clamp and Vise. Charles L. Bellamy, Arlington, N. J.
286,385. Adjustable Drawing Knife. John S. Cantelo, Taunton, Mass.
286,388. Ratchet Bit-brace. Wm. R. Clarkson, Buffalo, N. Y.
286,393. Fire-alarm. Frederick A. Copeland, La Crosse, Wis.
286,401. Fire-proof building. Wm. H. Dolman, St. Helen, Oreg.
286,405. Paint-brush holder. Albert T. Edwards, South Kingston, R. I.
286,434. Imitation stained glass. F. Benedict Herzog, New York, N. Y.
286,539. Door-hanger. George W. Hey, Syracuse, N. Y.
286,542. Illuminating vault-covers or grating-tiles and surfaces made of the same. Thaddeus Hyatt, New York, N. Y.
287,552. Lumber Drier. David F. Noyes, Lewiston, Me.
286,555. Ventilating screen for windows. Emmeline W. Philbrook, Boston, Mass.
286,558. Skylight. John C. Ryan, Detroit, Mich.
286,559. Sash-holder. Edson E. Shepard, Watertown, N. Y.
10,391. (*Reissue*). Steam-heater. William B. Dunning, Geneva, N. Y.
286,584. Window Frame. William W. Boyington, Highland Park, Ill.
286,597. Chimney Top. Wendelin Faulstich, Belleville, Ill.
286,648. Hot-air magazine. Joseph H. Spurrier, Joplin, Mo.
286,714. Door-bell. Enoch Lawson, San Francisco, Cal.
286,774. Door-hanger. Caleb Brinton, Chicago, Ill.
286,842. Wrench. Granville W. Pittman, Keokuk, Iowa.
286,847. Pipe-tongs. Henry Rhyn, Cincinnati, O.
286,850. Fire-escape. Albert N. Sande, Chicago, Ill.
286,858. Liquid Paint. Roderick H. Smith, Dunkirk, N. Y.
286,892. Brick-machine. William Andrus, Keokuk, Iowa.
286,894. Plane. Fortune L. Bailey, Freeport, Ind.
286,912. Gate-hanger. Charles Daniel, Butler, Mo.
286,535. Door-latch. Frederick J. Lee, Oswego, Kan.
286,951. Stench-trap. Randolph McBee, Washington, D. C.
286,964. Hollow Auger. Jas. A. Rodman, Lebanon, Tex.
286,884. Mould for glass tiles for floors, etc. Laurin D. Woodworth, Youngstown, O.
10,393 (*Reissue*). Apparatus for Drying and Seasoning Lumber. John Owen Smith, Jamison, Ala.
287,013. Endless Hod Elevator. Oliver N. Eaton, New York, N. Y.
287,021. Levelling Rod. William Gurley, Troy, N. Y.
287,065. Door Hanger. Sidney M. Stevens, De Kalb, Ill.
287,071. Automatic Fire Extinguisher. Caleb C. Walworth, Boston, and Osborn B. Hall, Malden, Mass.
287,099. Steam Radiator Attachment. R. T. Crane, Chicago, Ill.
287,142. Fire Escape. Charles J. Lung, Rochester, N. Y.
287,145. Spacing Instrument. James O. Madison, New York, N. Y.
287,149. Radiating Drum for Hot-Air Furnaces. Jacob Miller and Daniel Mager, Allentown, Pa.
287,193. Pipe Wrench. James L. Taylor, Ishpeming, Mich.
287,194. Revolving Wrench. Samuel A. Thomas, Charleston, Mo.
287,219. Hatchway Protector for Elevators. Robert T. Bean, Mount Sterling, Ky.
287,230. Two-Room-Heating Fire Back and Frame. Jas. H. Burnham, Fayetteville, Tenn.
287,233. Fire Escape. William S. Cassedy, Kelley's Station, Pa.
287,245. Weather Strip. Peter Cool, Manhattan, Kans.
287,246. Sink. George Frederick Coomber, Kansas City, Mo.
287,257. Fire Escape. Dennis P. Edgar, Jackson, Mich.
287,271. Vise. Porter A. Gladwin, Boston, Mass.
287,286. Lightning-Rod Joint. Wm. Hewitt, London, Ontario, Can.
287,287. Safety Appliance for Elevators. John Hodges, Westfield, N. J.
287,369. Mercury-Seal Trap for Lavatories, Bath Tubs, etc. Abraham Edwards, Asbury Park, N. J.
287,371. Joiner's Plane. William B. Fenn, Meriden, Conn.
287,373. Tile Hearth or Vestibule Floor. Isaac L. Frankem, Indianapolis, Ind.
287,378. Pipe Tongs and Cutter. Henry Herbert, Cincinnati, O.

Ricker's Calorific Positive Pump.

THIS latest invention in pumps is so wide a departure from usual methods, a brief description will not be uninteresting, as it is without moving parts, needs no lubrication, and has nothing to get out of order. Its capacity is to throw 200 gallons 50 feet high per hour, and is automatic in action, being operated by steam from the combustion of gas as follows: A steam generator, contained within a cylindrical base, supplies steam to the cylinder above it displacing the water therein, until three-quarters of the contents have been driven out, when the steam suddenly condenses and forms a vacuum, the result of which is, the cylinder becomes again filled with water from the source of supply (well or cistern) and the operation is again repeated, and will continue to be, until the water fails or the gas gives out to supply it with fuel. It vaporizes about one tablespoonful of water at each discharge, and the construction is such, that it is impossible to generate a greater amount of steam than is just sufficient to effect each intermitent discharge.

IT is difficult, says the *Mississippi Valley Lumberman*, to ascertain the exact condition of the log drive on the main Mississippi. There is now some 15,000,000 feet in the main boom at Minneapolis which are being sorted. Between the city and St. Cloud there are two crews driving with each from 10,000,000 to 15,000,000 feet coming along slowly. At St. Cloud is the rear of the main drive having in it from 75,000,000 to 100,000,000 feet. They have left above Sauk Rapids some 15,000,000 feet hung up. It is now sure that the mills of Minneapolis will have a full stock of logs and plenty to carry over.

IN his report on the trade and commerce of Venice, Vice-Consul de Zuccato gives many particulars illustrating the remarkable revival in that city of the art industries for which Venice was so renowned in other times. The most noteworthy are glass manufactures, mosaics, colored enamels, pottery, artistic castings, furniture, lace, and the copying of ancient brocades and damasks, recalling the glorious days of the Republic when the Venetian looms produced magnificent stuffs, embroidered with gold, silver, or silk, which the Doges sent as gifts to foreign potentates. The art, which was entirely lost, was rediscovered in 1857, and is now recovering some of its ancient splendor. Bead making alone, which, in spite of all efforts to manufacture this article elsewhere, has always been the special privilege of the Venetians, gives at this time, in Venice, employment to about 15,000 persons.

The Sewerage of Paris.

AFTER a full discussion on the subject, the Technical Sanitary Commission of Paris passed a resolution embracing thirty-four articles, the most important, or rather those which throw out suggestions that might be followed in most American cities with good sanitary results, we append, omitting such as are already practiced in this country or are impracticable, at least to Chicago sewerage. Those requiring the discharge of water-closet matter into sewers passed by a vote of 21 to 6.

Art. 2. Every water-closet shall be supplied from a reservoir by a supply-pipe or by other means, with a sufficient quantity of water to insure a minimum supply of 10 liters per person per day.

Art. 4. The waste-pipes of sinks must be trapped near the upper end.

Art. 5. All leaders should be intercepted so as to prevent direct communication with the sewer.

Art. 6. Every soil-pipe or sink waste should be carried above the roof to establish active and permanent ventilation.

Art. 7. It is desirable that these soil-pipes carried above the roof, as before said, should be flushed by automatic intermittent flush-tanks, located on the highest story where there are closets.

Art. 8. In order to insure a hermetic and permanent interception between the sewer and the house, the outlet-pipes shall be supplied with traps at their lower ends before entering the public sewers.

Art. 10. It is necessary to continue the suppression of the system of fixed vaults. To that end new vaults will not be established, except in cases to be determined by the administration, where the absence of a sewer, the arrangement of the existing sewer, the insufficient supply of water, etc., will not permit the direct discharge either into the existing sewer or a special sewage system.

Art. 11. A basin with sloping sides should be sunk at the bottom of the vault, under the manhole cover, to render the work of emptying easier and more rapid.

Art. 12. In vaults now existing ventilation should be accomplished by inlet-pipes, and by pipes open at their upper ends, and carried above the roof of the house.

Art. 14. The emptying of vaults should not be authorized, except by aid of the most perfect apparatus, especially such as creating a vacuum in the chambers, have arrangements for the disinfection of the escaping gases.

Art. 20. The total discharge of excremental matters into the sewers may be authorized in the case of sewers having a large and constant flow of water, not subject to an accumulation of sand, and in which matters are carried without halting to the point of discharge in the collecting sewer.

Art. 21. It may be permitted also in sewers less abundantly supplied than the above, but having fall and flow sufficient for the removal of all matters, on condition that the improvements be carried out, which are indicated in Articles 23 and following.

Art. 22. In sewers which do not satisfy the conditions specified in Articles 20 and 21, or in which the back water of the collecting sewers may check the flow, the discharge of excremental matters can be made only in tight pipes placed inside of the large sewers, and carried far enough to reach sewers which do meet the prescribed condition.

Art. 26. To insure the cleansing of the sewers, independently of the water admitted at the inlets and such as comes from habitations, there will be established a system of flushing by means of reservoirs discharging 10 c. m. of water, placed at the head of each sewer, and at maximum intervals of 250 m. along its course.

These reservoirs will be emptied instantaneously once or twice each 24 hours.

Gangs of workmen will follow the movement of the water discharged, to cause deposited matters which remain attached to the walls of the sewer to be carried on with the flow.

The length of the sewers in which this mode of cleansing by flush-tanks may be employed, is about 424,000 m.

Art. 27. There will be established in the collecting sewers a certain number of sand boxes (15 at the outside) in such a way that the cleaning boats or wagons may secure the removal of these matters with a delay of not more than 24 hours.

Art. 28. Movable catch-basins will be established at the inlets of sewers under paved streets, or others which discharge sand, manure or heavy matters into the sewers. The number of these catch-basins is estimated at 2,000.

Art. 32. The waters of the sewers of Paris taken in their present condition—that is to say, containing a large proportion of excremental matters—can be subjected to processes of purification by the soil without danger to the public health.

Art. 34. A study will be immediately undertaken as to the purification of the waters of the departmental collectors of the Seine and of the sewers of Paris, which will be connected with them by the irrigation of the plains bordering the river above Paris.

Synopsis of Building News.

Chicago, Ill.—The stage of the season is marked by fewer commencements of new buildings, yet there are few idle hands as yet among the builders, while the outlook is quite encouraging, as this department of activities does not seem to be affected in the remotest degree by the depression in some other branches of business.

Architect W. L. B. Jenney: For Sears estate, two additional stories to the Sears building, Nos. 99 and 101 Washington street, with elevator and other internal improvements for a first-class office building, completed October 1, at a cost of $24,000. For Mary E. Hall, dwelling, No. 22 Walton Place, 25 by 61 feet, cost $6,000. For R. B. Walford, four-story dwelling, 24 by 32 feet, cost $5,200. For L. R. Giddings, Downer's Grove, ornamental cottage residence, cost $7,000. For H. D. North, same place, residence, cost $4,500. The above all under way. Projected: F. M. Sanger, Muskogee, I. T., villa, stable, ice house, fruit house, and other outbuildings (taking proposals). Eastern parties, additional story to No. 126 Kinzie street. For president of Seminary of the Northwest, southern Missouri, four-story domitory, with study and bedrooms, for fifty pupils (to be commenced immediately).

Architect Lucian F. Plympton: For Elijah Coombe, two three-story double houses, walls of southern Ohio brick, slate roofs, 71 by 45 feet, cost $10,000 each, under way; Douglass, contractor. For Frederick Hassaureck, three-story residence, walls of Indiana limestone, pitched face for first floor, second floor, brick plastered on exterior, slate roof, area 65 by 65 feet, cost $30,000 (projected).

Architect J. M. Van Osdel: Two three-story houses on Ashland avenue, for S. D. Stanbro, cost $9,000 each. Also a dwelling for Mrs. Spry, corner Monroe and Loomis streets, three-story, 33 by 76 feet, cost $25,000. Also planned dwelling for J. M. Adsit, corner Dearborn avenue and Elm street, three-story, 34 by 55 feet, cost $35,000. Also plans for B. L. Crumb's house, corner Adams and Leavitt streets, two-story, 25 by 46 feet, brownstone front, cost $7,000. Also planned a warehouse for Ewing estate, on Milwaukee avenue, near Lake street, three-story, cost $12,000.

Architect H. Sierks has planned two buildings for George Raithel, on the corner of Hoyne avenue and Lexington street, containing six flats; materials, Anderson pressed brick, with terra-cotta ornaments; cost in the neighborhood of $15,000. Mr. Sierks has also planned for Mr. Multig two buildings on Lexington street, two-story and basement, containing six flats; material, pressed brick front, with stone trimmings; to cost $10,500. Also a $25,000 warehouse at No. 146 North Water street, to be five stories high; material, brick. Mr. Sierks has planned four buildings at the corner of Division and Wells streets. They will be two-story and basement, and constructed of pressed brick, with limestone trimmings. They will be built for C. F. Gray, and will cost about $20,000. The same architect has planned a residence at No. 2612 South Park avenue, three-story and basement, with Berlin stone front, at a cost of $18,000, for Bletner Bros. Also a three-story apartment building, and livery-stable in the rear, at a cost of $22,000. Also a $20,000 structure on Wood street and Chicago avenue, three stories and basement, designed for an apartment-house and stores on ground floor. Also, at No. 26 Lowe avenue, a three-story apartment-house, to be constructed of Anderson pressed brick, with limestone trimmings, to cost $10,000, for Theodore Dyckman.

Architect L. G. Hallberg has drawn plans for a four-story factory, 61 by 100 feet, to be erected on Goose Island for Amos & Frost, to cost $15,000. The building will be used for the manufacture of spring beds. Also made drawings for a handsome frame house for Mr. H. H. Rountree, to be built at Plattsville, Wis. The structure will be 40 by 55 feet, two stories and attic high, and the style will be Queen Anne. Also plans for a house for Mr. Otto Peitch, 31 by 47 feet in size, and two stories high. The style is Swiss villa, and is very unique and attractive. Also completed drawings and begun the construction of a residence for Mrs. Mathilda Hale, on Jackson street, near Ashland avenue. It will be 25 by 87 feet, three stories high, and will have a front of rock-faced brown-stone. Also will erect two houses for Mrs. Eliza L. Williams, on South Park avenue, near Thirty-fifth street. They will be 50 by 64 feet in size and three stories high, with fronts of Anderson brick, which will be ornamented with brown-stone and terra-cotta. Completed they will cost $15,000. Also has plans made for two houses for Henry W. Leman, on Erie street, near the lake-shore drive. They will be three stories and basement high, and 32½ by 50 feet in size, with fronts of New York blue sandstone, rock-faced. They will cost $10,000.

Architect C. C. Miller has planned for J. B. Storey and E. A. Clarke a warehouse on State street, near Fourteenth street. Also four flats for Peter McDonald on Leavitt street, near Ogden avenue, for $6,000. Also two flats for Artemus Blake, on Paulina near Madison street, to cost $6,000. Also a fine porch and bay window for Honsinger's house, on Park avenue, near Leavitt. Also the extensive remodeling of Dr. A. B. Clarke's house, No. 68 Ogden avenue. Also the same service for Mr. B. L. Pease's residence, between Lincoln and Robey streets.

Cincinnati, O.—The present condition of building is good; both architects and builders are busy. The outlook for the coming season is cheering.

Architect Geo. W. Rapp: For C. Moerling Brewing Co., corner of Henry and Dunlap streets, four-story and basement brick stable, with asphalt roof, 100 by 100 feet, cost $25,000; Wm. Miller, contractor. For F. Ezzeking *et al.*, one or more three-story brick dwellings on Myrtle Avenue, Walnut Hills, 38 by 50 feet, cost $6,500; Kemme and Rosensfiel, contractors. For same parties, two or more three-story brick dwellings on Myrtle Avenue, Walnut Hills, 29 by 55 feet, cost $6,000; same contractors. For F. Thauwald, two and a-half story pressed brick dwelling, with slate and tin roof, on Gilbert Avenue, Walnut Hills, 41 by 56 feet, cost $12,000; same contractors. All of the above are under way.

Architect S. E. Des Jardines; Cincinnati Sanitarium—amusement hall, billiard room and conservatory—brick walls with slate roof, 52 by 72 feet, cost $3,500; W. Cummings, contractor. For W. R. Teasdale, two dwellings, nine rooms, two stories and attic, slate roof, 25 by 53 feet, cost $5,900 each; J. Griffith & Sons, contractors. For H. H. Finch, two-story frame dwelling, seven rooms, slate roof, 32 by 35 feet, cost $4,500 (projected). For J. W. Leiben, frame dwelling, seven rooms, cost $3,200. For W. H. Blymer, alteration and additions to frame dwelling, cost $4,000. All the above under way except where noted.

Clinton, Ia.—The Building status is satisfactory, and the outlook fair. Quite a number of cheap cottages are being built, ranging in cost from $1,000 to $1,800.

Architect W. W. Sanborn: For S. B. Gardiner, two-story and attic brick, stone trimmings, slate roof, 53 by 71 feet, cost $20,000; L. Upton and E. Deepner, contractors. For G. M. Custis, two-story brick, stone trimmings, slate roof, 50 by 69 feet, cost $16,000; J. Anthony, contractor. For J. Morris, two-story frame, 34 by 60 feet, cost $5,000; A. E. Wright, contractor. For F. Sutton, two-story frame cottage, 32 by 55 feet, cost $3,000; same contractor. For A. Sutton, two-story frame cottage, 32 by 50 feet, cost $2,500; same contractor. For City of Morrison, Ill., two-story addition (brick) to schoolhouse, 53 by 53 feet, cost $7,000: J. B. Mason, contractor. For First Presbyterian Church Society, Morrison, Ill., church building, brick and stone, 58 by 92 feet, cost $12,000; same contractor. All of the above are under way.

Evansville, Ind.—The building for this season is approaching a finalty, and very little work will be commenced from this date until spring.

Architects Reid Bros.: For Crawfordsville Building Association, Crawfordsville, Ind., opera house, brick walls, 86 by 165 feet, auditorium 60 feet diameter; contract not yet let, but building to be commenced at once.

Indianapolis, Ind.—Building continues quite active. Within the past week or so quite a number of medium-sized buildings have been begun. The outlook is encouraging.

Architect C. A. Wallingford: For A. A. Hazelrigg, frame dwelling, 30 by 45 feet, cost $3,500. For Carrie Anderson, VanWert, Ohio, frame dwelling, 32 by 50 feet, cost $5,000. For E. M. Doty, Columbus, Ohio, frame dwelling, 38 by 50 feet, cost $5,000. For Jas. M. Kerr, same place, frame dwelling, 31 by 51 feet, cost $5,000. For J. S. Catherwood, Hoopeston, Ill., frame dwelling, cost $3,000. E. M. Doty's building is already contracted; J. B. Coulter, contractor. The others are projected.

Kansas City, Mo.—The present outlook for building is rather encouraging after the long spell of rainy weather.

Architect S. E. Chamberlain: For M. F. Tullis, two-story dwelling, 33 by 51 feet, brick walls, slate roof; cost, $5,000: Remic & Stone, contractors. For C. W. Whitehead, five three-story and basement brick dwellings, 43 by 94 feet, cost $21,000; Remick & Stone, and Baker & Dunlap, contractors; all under way.

Minneapolis, Minn.—Architects and builders are reasonably occupied with encouraging prospects for the future. The past season has been good, and unless all signs fail next will be better.

Architect T. B. Long: For W. W. McNair, brown-stone residence, two-stories and attic, interior walls brick, tile roof, 50 by 106 feet, cost $75,000; L. C. Bisbee, contractor. For S. W. Lusk, two-story and attic frame store budding, cost $5,000; R. E. Trofton, contractor. For Clark & Linton, three-story residence, pressed brick front, cost $12,000; Bingland & Turner, contractors. For H. V. DeMott, two-story and attic frame residence, cost $10,000; L. C. Bisbee, contractor; two-story frame residence, cost $3,000; B. E. Trofton, contractor. For E. A. Upham, two-story frame residence, slate roof, cost $5,000. For T. W. Hoyt (Redwing, Minn.), two-story and attic frame residence, cost $12,000. For S. W. Serl, two-story and attic frame residence, cost $3,500. For H. W. Huntington, two-story and attic frame residence, cost $6,000. For S. B. Mattison, livery and "bus" stable, frame, cost $7,000; S. C. Cutter, contractor. For D. Fish, double brick tenement, English basement, cost $10,000; T. S. Seaver, contractor. For D. W. Cassiday, block of four houses, brown-stone fronts, cost $25,000; R. E. Trofton, contractor. For Humphrey, Dagget & Lang, three-story double store, pressed brick front, cost $10,000; — Robinson, contractor. For F. C. Bail, two-story and attic frame residence, cost $5,000. For L. C. Coleman, two-story and attic frame residence, cost $12,000. For G. M. Naylor, two-story frame residence, cost $4,000; — Robinson, contractor. For Albert Smith, two-story frame dwelling, cost $5,000; L. C. Bisbee, contractor. For St. Mark's Church, alterations, cost $8,000. For W. W. McNair, greenhouse and stock barn, cost $3,000 and $10,000 respectively; L. C. Bisbee, contractor.

Richmond, Ind.—Builders are quite busy, but have been much delayed by wet weather. The outlook for the coming season is not clearly defined, but architects and builders are hopeful.

Architect John A. Hasecoster: For Mrs. Johns, two-story brick, stone-front, business building, 50 by 35 feet, cost $8,500; T. W. Roberts, contractor. For D. Wheelan, two-story brick residence, stone front, slate roof, cost $4,500, same contractor. For W. Grottendick, two-story brick dwelling, stone trimmings, cost $3,200; Bartel & Co., contractors. Steeple for German Lutheran Church, Dayton, O., brick and stone and slated, cost $4,000, J. C. Peters, contractor. All under way.

St. Louis, Mo.—Building moderately active at this stage of the season.

Architect Ramsey: For Adolph Kummerer, two-story brick building with slate roof, 44 by 90 feet, cost $9,000; projected and about to be started; sublet.

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THE

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Special Notice.

FOR the past eight months letters have come to us from the principal cities in the East, and also from those along the line of railroad from St. Louis to Denver, addressed to R. C. McLean, editor of this journal, indicating that a swindler by the name of W. H. Gault was passing himself as Mr. McLean, and securing cash for subscriptions and advertising cards. As we became aware of his operations, we used every means to stop his swindling by publishing him, etc., but without success. Recently he turned his attention to the *Furniture Review and Interior Decorator*, of New York, personating Francis J. McAvoy, its proprietor, and, being published as a swindler by him, was cleverly caught in Baltimore. It was then discovered that his attention had been directed to numerous other papers, forged checks, etc., which proved the case to be beyond excuse, and on the 5th instant W. H. Gault was sentenced to two years in the penitentiary. This sentence is most severe, and falling upon a young man it seems doubly so, but the public must be protected, and when a young man with talents that would give him at least a fair living and a respectable standing in society goes deliberately into the swindling business, he can expect nothing but the law's punishment when he is caught, as he will be sooner or later. Our subscribers and the public should insist upon seeing the credentials of any party soliciting for or representing this journal in any way, and all trouble will be avoided.

UNDOUBTEDLY among the important subjects that will engage the early attention of the present Congress will be what is known as the office of supervising architect — a bureau unknown to law that has in some inscrutable way attached itself to and become recognized as a component of the treasury department of the United States. Whatever may have been the animus that projected the recent inquiry into the administration of this office by its late chief, Mr. Hill, or whether any of the charges made were sustained or not, are questions of little significance compared with the graver matter brought to the surface by the somewhat, necessarily perhaps, superficial investigation, viz: the disbursement, unchecked by the common safeguard of a bondsman, of millions of dollars annually of the public money through that unauthorized channel; the assumption of making the plans for all government buildings; the deciding as to what materials shall be used in their construction; fixing the terms of all proposals, etc., etc. That Congress, now that a wide publicity has been given to these unprecedented assumptions of power, will not permit such an anomaly in our government to exist any longer, but will endeavor to provide some other method that will be freer of possible abuse, and furnish a better class of public buildings, is morally certain. How shall this be done? As some suggest, by legalizing the present bureau and hedging it about with restrictions and safeguards? We confidently assert the labor involved in that public trust is beyond the powers of any one architect, though he were endowed with the genius of a Wren, and no amount of tinkering on this abortive office will turn the results from ignominious failures. The recommendation of the committee of investigation more nearly meets the issue, *i. e.*, a board of supervising architects in lieu of one person. We are heartily in accord with this idea of a multiplicity of counsellors, yet see a difficulty likely to arise from its adoption, and but one way to successfully surmount it. Who shall compose such a board, and how shall its members be chosen? From the architects and builders of the country? If so, to whom shall be delegated the power of their selection, if they are to represent the best elements of those professions? Here is the difficulty to be encountered, an almost insurmountable one in view of the object aimed at, as, if by any chance the formation of such a board should be dependent on partisanship, the government would soon be in the predicament of the man who was abscessed of one devil to let seven others worse than the first get possession of him.

THE only certain way to avoid the possibility of such a deplorable result would be, as we have heretofore suggested, to assign the government architecture to the war department, there to be reassigned to that eminently practical branch of the army, the corps of topographical engineers, out of which body an intelligent and competent board could be formed equal to all the architectural emergencies of the government. Such a supervising architectural board would be out of the pale and influence of party successes or defeats, and would possess that permanency which insures the purposes for which it would be organized, the longevity of administrations having no effect on its life. The duties of this corps are largely constructive, much of them of a purely architectural character. In point of fact, to it and that other equally practical branch of the army, the ordnance corps, is the country indebted for most of its noted and stable architecture, displayed in our national arsenals, armories and fortifications. Congress need

not go out of Washington to find evidences of the fitness and ability of the engineer corps to deal with this matter. The marble wings of the capitol building were designed, planned and supervised by a topographical engineer. So, too, the aqueduct at Washington, the war department building also, and that greatest in the world arch of masonry, the arched bridge over Cabin John's Creek, Va.; and we hardly need to mention the wonderful achievement of Col. Casey, the placing of a new foundation under the Washington monument, after it had been built to an altitude of 150 feet, an architectural engineering accomplishment without its parallel in architectural history. We sincerely trust when the question of the supervision of the public buildings comes up for consideration, Congress will view the situation from a patriotic standpoint and not from the lower level of party interest, and by a wise enactment create a bureau of public building supervision constituted of this corps, and make such provision as will throw open to the architectural genius of the country the designing and planning of all the public edifices hereafter to be erected. By such a course, with such a board of judges on the merits of plans and materials to be used; with the right recognized that every successful competitor should superintend the construction of his own designs, aided by a consulting architect furnished by the corps, there would be no more architectural abortions foisted on the government to the public shame. Parties rise, fall, and are forgotten, but the nation continues: hence the architecture of a nation should be monuments, epitomizing for all time its intelligence, civilization, wealth and grandeur.

THE drift of the educational world is strongly in the direction of industrial training. Witness the kindergartens, Felix Adler's school for "creative work" in New York city, Mr. Leland's school for carving and repoussé work in Philadelphia, and many other enterprises in our own country, not to mention the great schools of Europe, upon which royal and imperial aid has been beautifully bestowed. The expression "Manual Training," in an educational sense, seems to be applied specially, if not exclusively, to education in the use of tools, and several experiments in this direction have been and are in progress, which are attracting the attention, not of teachers only, but of all interested in education. Of these the most prominent in America is the Manual Training School of the Washington University, of St. Louis, which is now in the fourth year of its existence, with an enrollment at the present time of two hundred pupils, its first class of twenty-nine graduates having completed the prescribed curriculum in June last. This course consists of the mathematics, physical sciences and English literature usually taught in a high school, with the addition of mechanical drawing, and two hours of instruction per day in the use of woodworking and ironworking tools, with and without machinery, the whole covering a period of three years. The success of the school has exceeded the expectations of its most sanguine friends, and the school is really no longer an experiment. Another promising move in the same direction, though for the present confined to a lower plane, or, rather, occupying only a part of the ground occupied by the St. Louis school, is that lately inaugurated in Boston, in connection with the public schools. The school board of that conservative city has advanced very cautiously. Last January a vacant room in the Dwight School was fitted with carpenters' benches, and furnished with the necessary tools. An instructor was employed, and eighteen boys, pupils in the Dwight School, received instruction in carpentry two hours per day for four months, without interference with their ordinary studies. The impression made by this simple and comparatively inexpensive experiment is shown by the action of the Boston school board on November 13 of this year, which fully commits the board to a system of tool instruction in the public schools of that city. The committee on Industrial Education state that their report "is the result of long and careful consideration of a subject whose importance is so generally recognized that it seems hardly necessary for us to repeat the arguments already adduced in its favor." "What we were requested to do, and have here done to the best of our ability, was to propose a feasible and economical plan of grafting manual training upon our public school system."

THE plan which was adopted by the board is, in brief, this: That certain unoccupied rooms in the basement of Latin School be furnished with benches, tools and materials sufficient for the instruction of twenty boys in each room so used; that competent teachers be secured; that each room thus prepared "be visited each half day in the week by successive delegations of twenty boys from the different grammar schools in the neighborhood." In this way the class of twenty boys could have two hours' instruction in toolwork per week, being in attendance at the grammar school nine half days per week, and at the workshop one half-day. Two hundred boys could thus be instructed in carpentry every week by one teacher. This is certainly a very modest beginning. The committee stopped here, not because its members regarded this as sufficient for the needs of the case, but because they knew it would be "useless to ask [the city council] for the appropriation of a sum of money for the establishment of a separate and fully equipped industrial school, where instruction and practice in the use of tools could be combined with mathematics, drawing and the English branches of a high school course, as in the Manual Training of Washington University at St. Louis,—a model institution of its kind, whose like, it is to be hoped, will eventually exist in Boston." Such a school, modeled very closely after that at St. Louis, is soon to be opened in Chicago, in the elegant building of which we present an engraving in this issue. The Chicago Manual Training School is the offspring of private enterprise and liberality, and to the Commercial Club of this city Chicago owes the existence of an institution of which any city might be proud, and for which the citizens of Boston, with all her "solid men," have thus far sighed in vain. The school was incorporated under the laws of the State of Illinois, April 11, 1883. Its control is vested in the following board of trustees: E. W. Blatchford, president; R. T. Crane, vice-president; Marshall Field, treasurer; William A. Fuller, secretary; John Crerar, John W. Doane, N. K. Fairbank, Edson Keith, George M. Pullman. The object of the school is thus stated in the articles of incorporation: "Instruction and practice in the use of tools, with such instruction as may be deemed necessary in mathematics, drawing, and the English branches of a high-school course. The tool instruction as at present contemplated shall include carpentry, wood-turning, pattern-making, iron chipping and filing, forgework, brazing, and soldering, the use of machine-shop tools, and such other instruction of a similar character as may be deemed advisable to add to the foregoing from time to time, it being the intention to divide the working hours of the students, as nearly as possible, equally between manual and mental exercises." It is the intention of the board of trustees to open the school as soon as possible—certainly by the first day of February, if not earlier. The examinations for admission will probably be held during Christmas week; due notice will be given of time and place. The director of the school is Mr. Henry H. Belfield, for many years principal of the North Division

High School, of this city. We presume that he is prepared to furnish whatever information concerning the school our readers may desire.

SINCE our last issue we have to record three serious occurrences, two of them involving loss of life,—the collapsing of the new State House at Madison, Wis., causing the death of four workmen; the falling of a large four-story building at Buffalo, N. Y., also causing the death of four men; and prostration of a large church building at Pittsburgh, Pa., after the walls were ready for the roof. Each of these disasters followed close on the heels of the other, the Wisconsin State House disaster taking place early in the afternoon of November 8. The two last occurrences happened at too remote a distance for us to know more of the causes than the general newspaper report, which attributed their demolition to a high wind prevailing, made possible in the Buffalo instance by alleged faulty construction and too much weight on the roof. With regard to the Madison disaster, we have more definite information gathered by a special messenger to Madison, and the reports of other experts who examined the work on the ill-fated building, so that we believe that our deductions as to the real cause of the disaster—we cannot call it an accident—is as near the truth as it is possible to come. The facts of the case are these: The south wing of the Capitol building was under construction and the roof was being put on at the time of the collapse. The wing was nearly square. The outer walls were brick veneered with stone. Inside, and dividing the basement and first story, were three brick walls twelve inches thick, divided by piers, or rather pilasters, two feet square. From these pilasters nine-inch iron columns, resting on iron plates one foot square, were carried upward to the succeeding floors and the roof. At the top of each series of columns were placed iron girders which held the floor joists. On the under series of girders from floor to floor were placed the following series of columns above it (without any apparent provision for resisting lateral strain). It will be observed there were no capstones put upon the pilasters on which the iron columns rested—only a simple foot-square iron plate. Certainly this recital shows weak planning and faulty construction. First, the brick pilasters should have been at least three feet in thickness instead of two, and the brickwork protected by a properly proportioned capstone, while the iron plates should have been the size of the piers. Care would have been taken by a proficient to have estimated the weight they were to resist and proportioned them accordingly, and had that weight distributed equally. Not knowing the weight they were called upon to sustain, we cannot criticise the dimensions of the nine-inch iron columns, but certainly, constructing them in sections or parts, as is authoritatively alleged these columns were constructed, was not only a deviation from accepted practice, but a criminal act in violation of every law of building equity and common sense. For it is asserted that the firm, some obscure ironmonger in the interior of the state, had not a ladle large enough to run a whole column and was forced to run them in sections. Of course the iron chilled after each part was run, and they were was so badly "cored" that one side of a column was often inches in thickness while the opposite was left a mere shell.

THERE were several theories and suppositions in evidence as to the manner in which the catastrophe occurred—one that a side wall that was supporting a few floor joists, that had previously been cracked, had given away, and that the side walls, softened by water from the roof, were too weak to resist the pressure; but the preponderating evidence shows the giving away of one of the central piers, by the iron columns on and over it crushing into the brickwork—testimony that is supported by the statement of facts given above as to the construction. The coroner's jury, in its verdict, placed the blame on the architect and contractors. It was not shown that the architect who planned and supervised the construction was negligent of his duties during construction so far as he knew; in fact, he is given a character for perfect honesty and integrity; nor that the general contractor did not produce a fair quality of masonry; and as to the consulting architect, his duties were not clearly defined, and his responsibility is in the measure of his connection with the work, he probably acting only where his advice or opinion was asked for, though his having inspected the working drawings before the structure was commenced, and given his assent to their correctness, would place his responsibility with that of the architect in charge, as far as faulty designing was concerned We do not wish to say they are to be entirely exonerated from blame, but we would place the burden elsewhere than on their shoulders, namely, the Capitol Commissioners, who, by the "Cheap John" or competitive system of procuring plans, took the sure and certain method of getting only mediocre, or worse, plans for the superstructure—a false economy that appears to have governed the contract-letting as instanced in the foundrywork. We have time and again made war against this system in vogue with commissioners for public buildings, to get plans and contracts cheap (?), and until a sensible and businesslike system is adopted we shall continue to have this class of manufactured accidents ready to happen on the slightest provocation, with their natural concomitants, waste of public money, and the taking of innocent lives. The people of Wisconsin have no one to blame for the calamity that has happened at their State Capitol more than their public servants, as, if they had employed for the designing of their State House any one of the expert architects they called to view the ruins, and awarded their contracts in the same businesslike manner, there would have been no opportunity for this criticism, nor any regrets over waste of money and lives.

THERE have been several attempts made to organize a Real Estate Brokers' Association, or Board, in Chicago, all proving failures; but now it would appear a revival of the subject, through the Real Estate and Rental Association, promises better fortune. The Real Estate and Rental Association, organized something over a year ago by such real estate operators as were rental agents also, and felt the pressing need of closer intercourse in the interest of their clients, have found the organization to so fully meet the need as to be considered stalwart. The Association now proposes to enlarge the area of its usefulness by extending its membership to others of their class than for which it was originally instituted, a movement incited by several recent important transfers of properties through the instrumentality of the intermingling of its members at the Association rooms, and which might otherwise have been yet unconsummated. As the movement is yet in its incipiency, it cannot be foretold what the final development will be, yet the more sanguine are looking forward to the establishment, around the nucleus of the R. E. and R. A., of a board where real properties may be put on the market somewhat after the manner in which it is done in the real-estate exchanges at the East, that is to say, partaking of the nature of a call board. The real estate business of Chicago has grown to such a stature, that some better method for the ready purchase and sale of properties than isolated practice is required, and more than probable the method will result from the present agitation.

WILL county, Illinois, commissioners should be awarded the blue-ribbon by the architectural profession, for, upon the pressing need for a new county court-house being presented, they did not take the old stereotyped and likewise disreputable method of asking architects to contribute plans and specifications for nothing, offering a few hundred dollars as a bait where the outlay amounted to thousands; nor did they spend the county money in paying for a number of sets of plans by different architects; but having communicated with the architectural profession and finding upon what terms they were individually willing to work, they selected a good, reliable architect at a regular and standard price, and have gone to work in a businesslike and systematic manner to organize success. This is the first case of which we have knowledge in the history of public building where such an honorable and businesslike course has been pursued. While we present our congratulations, we hope that they will aid their architect in every way to produce a creditable structure, by trusting fully to his ability for its perfection, and that other commissioners of public work may "tact tent," as the Scotch say, and go and do likewise.

SINCE the mills have shut down, the editor of the *Mississippi Valley Lumberman* has turned his attention to writing on architecture — Minneapolis architecture. Hear him:

"It is said God made man in a fearful and wonderful manner, but for this reason the Almighty is not chargeable with, or to be called to account for, the creation of Minneapolis. We are no architect, and possibly have no right to have an opinion, but when we walk up and down the avenues of the city and note the architecture of the business embryo center of this mundane sphere, we are led to exclaim — what next? The cheap balloon Dolly Varden styles prevail, with useless projections, bay windows, cornices, cupolas, towers, minarets, porticos and mortgages, with all the colors of the rainbow to give tone to the styles. Many of these incongruities are chargeable to the depravity of the tastes of the people who have come here, bringing their prejudices in favor of the Hottentot style, the Esquimaux fashion, the Cockney notion, the Hacienda proportions, the Tepee regularity, the correspondence of the frontier cabin, the Ionic, Doric, Corinthian, Gothic, and all imaginable and inconceivable styles. A Gothic church with Corinthian pillars, an Esquimaux spire and an Egyptian interior, would come too near monotony in architecture to be even passable. Business houses 20 feet front, 100 feet deep, five stories high, with huge granite portals calculated to hold up one corner of the world, are just in fashion. Short buildings with long ells. Long buildings with short ells. Tall slim buildings with acute-angled tops. Flat squatty buildings with quarter-pitch roofs. Blood-red structures with broken zigzag lines of white. Green houses with fiery red trimmings. Mud colored residences with green mouldings and crimson sash. Houses that are mostly windows and *a la* Mexican houses in their lack of openings."

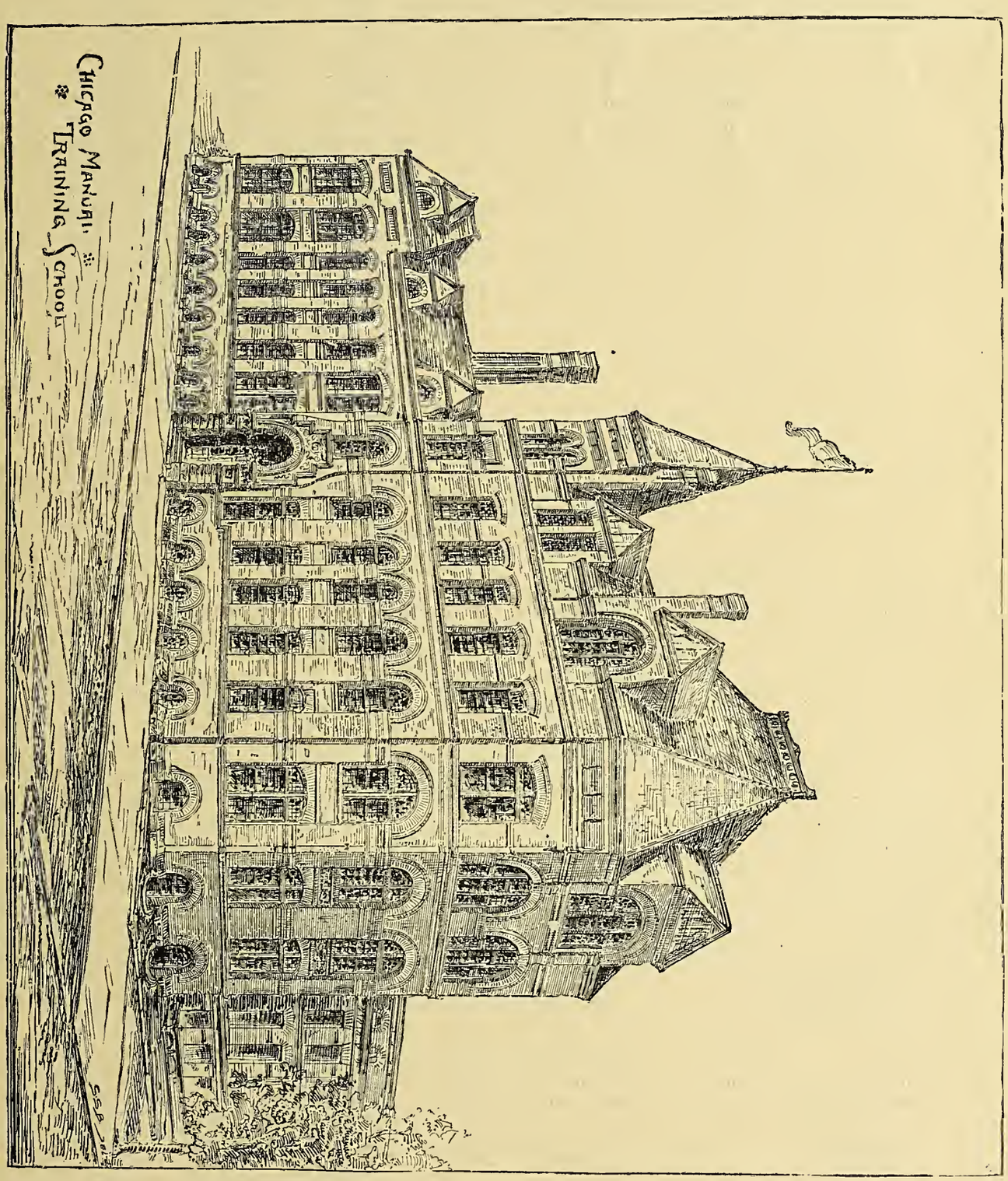
It is painful to be presented with such an exhibition of want of culture as this. It seems impossible that any man in this enlightened age should be so inappreciative of one of the most pronounced styles of architecture of the times, the *acme* of modern attainment, viz, the "conglomerate," as to even attempt a criticism of it. Well, before the mills get to running again in the springtime, familiarity with it may do much toward improving his taste.

AN important ordinance has been introduced and is pending before the city council of St. Louis, relating to the regulation of plumbing. The ordinance provides that no person shall carry on the business of plumbing unless his name and place of business are on file in the office of the Commissioner of Public Buildings, and all changes of places of of business must also be duly reported and recorded there. Under other provisions of the bill, every building shall be separately and independently connected with the public sewer, and in the absence of a sewer with a cesspool of such size as the commissioner may dictate. All drain-pipes must be of iron within the building, and for a considerable distance without the building, and shall be of a thickness of not less than ⅛ of an inch for pipes of 4 inches in diameter, and 5-32 of an inch for pipes of 5 and 6 inches in diameter. All iron pipes, before being used, must be subjected to both the water and kerosene test, and be coated inside and out with coal tar, pitch, paint, or some equivalent material. Joints of pipes must be made with molten lead, and where iron pipes connect with other pipes, shall be connected with air-tight brass ferrules. No steam exhaust shall be connected with any drain-pipe or public sewer, and where water-pipes are exposed to the frost they must be packed with mineral wool or equally good material. Grease traps shall be connected with the waste of every hotel, eating-house and restaurant. Other important matters connected with an intelligent system of plumbing have received, under this proposed law, the same special and specific attention, so that it would seem by its adoption a proper sewerage, at least, will be secured at that city.

ARCHITECT Henry Lord Gay, a gentleman well known to the architectural profession, has arranged to open a permanent exhibit and exchange for building materials and appliances in Chicago. This enterprise will benefit not only those whose profession or occupation has to do with the designing and construction of houses, but the general public as well, giving as it will an opportunity for personal inspection, in which a man can determine for himself what bricks, lumber, roofing, plumbing and decorative material, etc., are best for use, and if he can do so by visiting a permanent exposition of these articles, he will have simplified the matter of building very much, and secured a better habitation. Instructed attendants will receive all visitors and give any information that may be desired, so that people are likely to be attracted to it as a means of pleasant and profitable recreation. The stimulus which will be given to good building, by the competitive exhibits, will be one of the encouraging features of the undertaking, and as its success lies largely in the hearty coöperation of the architects, builders and building-supply men, we bespeak for him such recognition as his enterprise certainly warrants. We believe there is a pressing need for just such an exhibit, and that it will grow in importance with the growth of the building industry in the West. Mr. Gay proposes to throw the exhibit open to the public February 1. A large building has been secured in a central location. Admission will be free to the general public.

SOME recent fires have again demonstrated the suicidal policy pursued by our city government in permitting the telegraph and telephone wires to remain above ground. The firemen have power to and do cut them, but this is not easily nor quickly accomplished where, as is frequently the case, over one hundred wires are strung on one set of poles. The city has ordered them down, and one company strung two or three cables along the streets, and there the matter dropped. One company, the Postal Telegraph, is deserving of special commendation, and we would say patronage, because their lines are placed under ground; and in this they not only avoid the interruptions to their business, but are showing that the placing of wires under ground is thoroughly practicable and only a matter of a little extra cost to the companies, and should be insisted upon by public officer and private citizen until it is accomplished; and instead of the skyview above our streets presenting an appearance resembling a fine sieve, all will be clear, our architectural effects will not be marred, or our lives placed in danger by a network of wires overhead.

THE plan for Bertholdi's great statue of Liberty has been finally settled upon. It will consist of three parts. The lowest will be of granite or some other dark stone — ashlars decorated with broad shields bearing the coats-of-arms of the different states of the Union, and separated from the middle part by bold cornices. In the middle the stonework will be of a rugged style, such as was used by the Etruscans, in which "the masses are squared, but left rough in front." Above this will come the third and highest part, with upper and lower galleries, and with a graceful row of pillars with Ionic capitals. Above this will stand the colossal statue.



CHICAGO MANUAL TRAINING SCHOOL.—S. S. Beman, Architect.

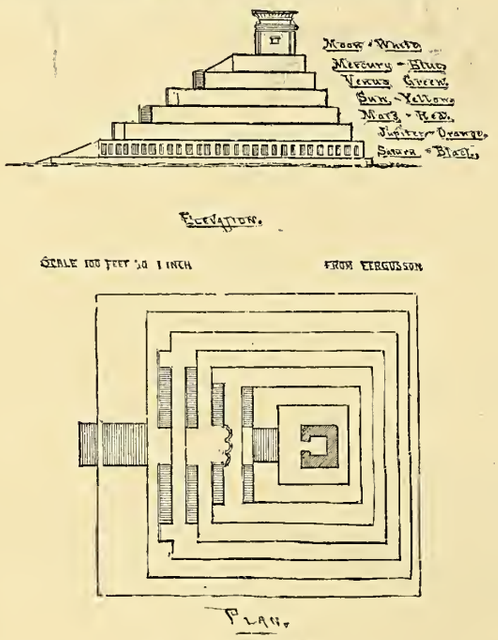
Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

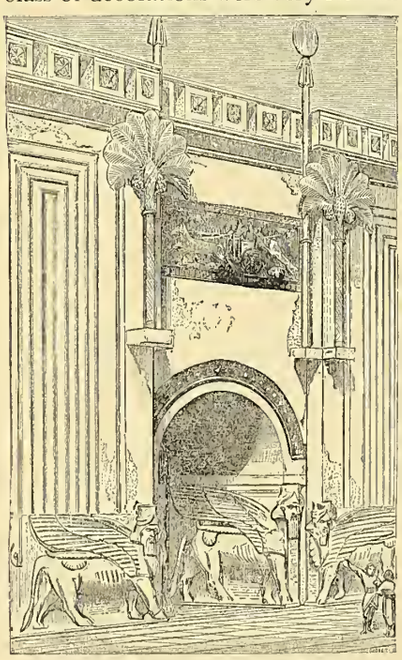
PART IX.—ASSYRIA (CONTINUED).

THE oldest temple we know of at present was at Warka (Erech of the bible), on the Euphrates below Babylon, built at least 2000 B.C., and now so utterly ruined that it is difficult to make out what it was like. The typical example of the Chaldean temples is that of Birs-Nimroud.



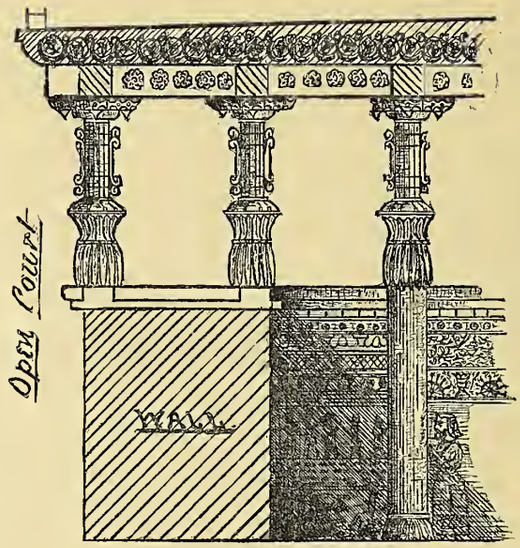
No. 1. Birs-Nimroud Restored.

This temple was dedicated to the seven planets, and adorned with the colors of each. The seventh or top story was evidently the cella or sanctuary of the temple. There were several methods of external coloring employed. The most curious was covering the brick or plaster with a glaze after the work was otherwise finished, and then firing by some process not yet understood. Another was by the use of enameled brick, and another by dipping small ornamental forms of clay in color and building into the walls, or setting them in the plaster forming the wall surface. Some of this class of decorations were very rich and ornamental.



No. 3. Entrance to Assyrian Palace.

The Assyrian palace was built upon a terrace raised some thirty feet above the plain, for the purpose of increased dignity and for defense. These terraces were built of sun-dried brick with an external protection of stone. There were flights of stone steps for those on foot. and long slopes for chariots, connecting the plateau of the terrace with the plain below. The palace occupied but a portion of the terrace, leaving room for a drive for chariots, and for soldiers when needed, against the parapet which crowned the top of the slope. There were several courts within the palace, with an entranceway formed by a broad arch flanked by huge human-headed winged bulls. These bulls seem to have belonged to the order of sacred things, and were typical of strength, speed and intelligence. The plans of these palaces show a thickness of walls and partitions of some twelve to fifteen feet. It was these thick walls that formed the second story.



No. 4. Section of Assyrian Palace.

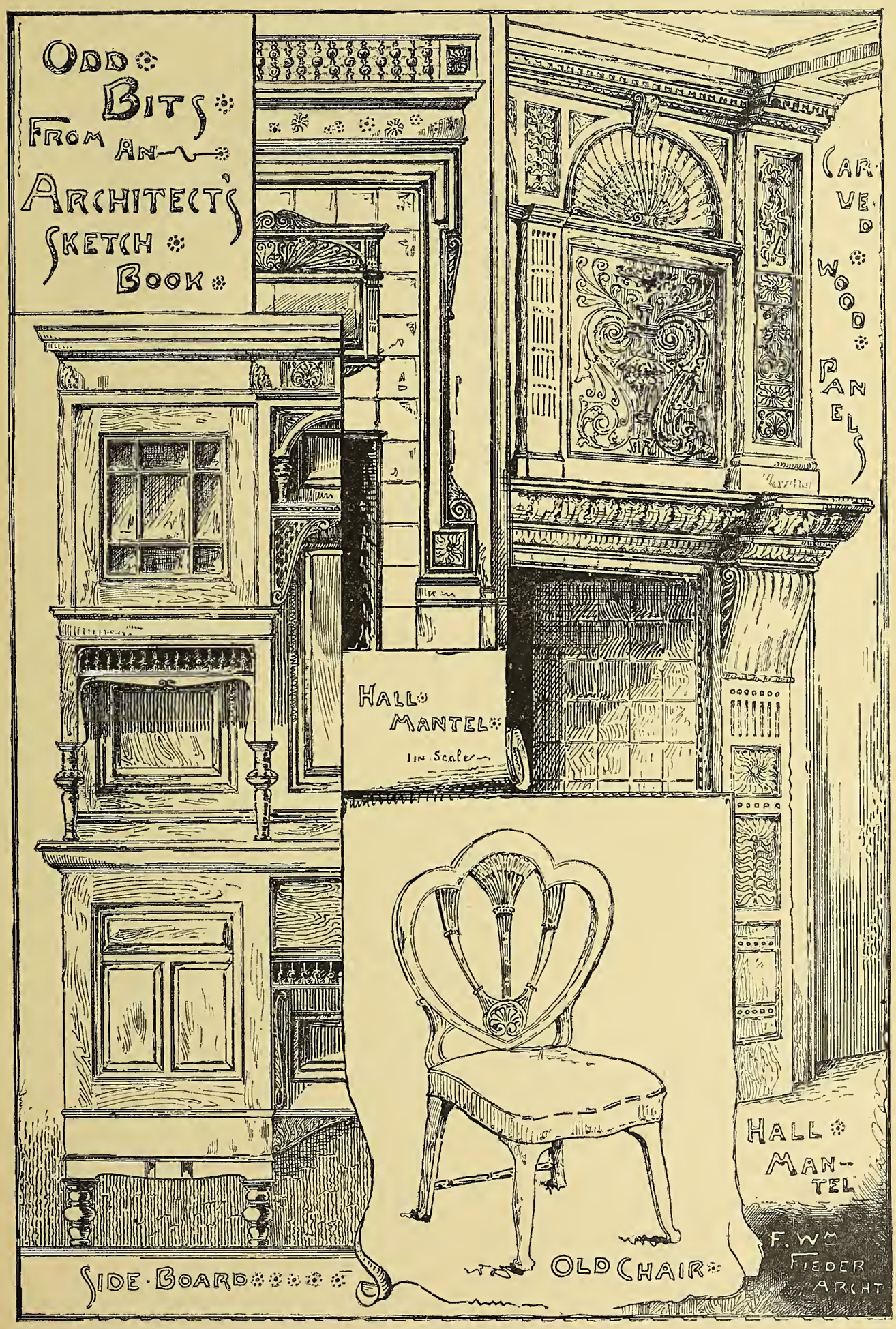
The roof was formed of logs, and covered with clay mixed with straw and pounded hard; then covered with a coating of bitumen, and then another layer of clay, forming a thickness through which the heat of the sun could not penetrate.

The rooms of the first story were used during the day. The ingenious arrangement protecting them from the heat of the sun, and the cool breezes of the evening could be enjoyed from the top of the walls. The walls were build of sun-dried bricks, the lower eight feet wainscoted with slabs of sculptured alabaster, on which is told in the bas-reliefs and in the cuneiform inscriptions the history of the king, his wars, his sports and his cruelties, together with figures of the Gods, sacred trees and religious ceremonies. Many other things were there, pertaining to the manners and customs of the times. We have learned from Babylon and Assyria that much supposed to be of Greek origin was derived from the valleys of the Euphrates and the Tigris, and originated with a much older civilization. The clay walls above the wainscot and ceilings were decorated in color. The floors were underdrained and often paved with tile.

These palaces when occupied by the king and his court presented a scene of Asiatic magnificence, whose influence can be detected on the one hand through the Byzantine, Saracenic and Moorish styles to the Gothic of Western Europe, and on the other through the Grecian and Roman, though less preceptible, to the same point.

There are two legends, that were read from terra-cotta tablets discovered in an Assyrian palace, that are very curious. The writings commence by stating that the tablets were made to preserve legends long since old. One is known as the legend of the Creation. It seems that the gods had made the earth, and while looking upon it one of them remarked that it would be a good place for folks in their image, so a god was sent down to make some. He landed and looked about him for a smooth, sandy spot, and taking off his head he peppered the sand with his blood; then putting on his head he seated himself on a stone to contemplate the result. Soon there sprang up a crop of men, women and children; then the god arose and preached them a sermon, gave them some good moral instruction, and told them to pray to the gods and be happy. All went well for a time, but the old serpent crawled around and beguiled the women, when everything went by sixes and by sevens.

The other is the legend of the Deluge, which Noah tells to Nimrod, how the gods appeared to him and told him that the world would be destroyed by a deluge, and commanded him to build a ship. When the ship was ready he embarked with his family and friends and his servants, and taking on board a pilot and crew he set sail and touched at a point of land where he took his menagerie on board and proceeded on his voyage. It rained seven days and seven nights. The pilot run the ship aground on a mountain. Then Noah sent out a swallow, which soon came back; he then sent out a raven, which, finding plenty of food, did not come back.


ODD BITS FROM AN ARCHITECT'S SKETCH BOOK
CARVED WOOD PANELS
HALL MANTEL
1 IN. Scale
HALL MANTEL
F. WM FIEDER ARCHT
OLD CHAIR
SIDE-BOARD

The waters having subsided, Noah disembarked and proceeded to the top of the mountain, where he built an altar and sacrificed to the gods who gathered at the burning. These legends, of which I have given but a brief outline, are told at great length, and are to be found in the works of George Smith, known as "Assyria Smith."

We must not judge Assyrian art by the standard of Greek art, for they were of two very distinct orders. Greek art depended upon beauty of outline and exquisite modeling, and upon elegance of proportion,—the highest refinement in art. Assyrian art was a gorgeous, barbaric display of rich color and a profusion of surface ornament. It is not easy to imagine a more magnificent effect than the court of an Assyrian monarch must have presented, in the best days of the empire, with all its pomp and stately ceremonials, in the gorgeously decorated halls of one of these great palaces.

Building-Stone.

PAPER READ BEFORE THE CHICAGO ACADEMY OF SCIENCE, NOVEMBER 27, 1883.

BY W. L. B. JENNEY, ARCHITECT.

CHICAGO is very rich in building-stone—in quantity, quality and variety. Lake Michigan and Lake Superior afford cheap transportation for the Vert Island sandstone of Canada, which is being used in the Royal Insurance Co.'s building; for the Marquette sandstone and for the marble of Delta county, Mich., etc., while the chain of lakes connecting with the canals opens to us the quarries of the sandstones of northern Ohio and the red sandstones of New York and Connecticut, and also all the granite quarries of New England; and not only these, but also the quarries of Scotland, from which we receive several varieties of granite and one excellent red sandstone, while our great system of railroads brings to Chicago every known building-stone in the country that is worth the transportation. We have the greenstone of Philadelphia, the Buena Vista stone of the Ohio river, and the rich cream-colored limestone from Minnesota, the beautiful white, red and black Hollowell & Bodwell granites from the Maine quarries, the Wirt Island or McArthur red sandstone, and many others as well as our local quarries, so that it may well be called an "embarrassment of riches," rendering somewhat complicated and uncertain the problem of finding the best stone for each special design.

A building-stone is one which by its chemical composition and physical structure is capable of resisting atmospheric influence and sustaining considerable pressure, and when used for architectural purposes the color and texture are matters of material importance, for they form a part of the design. It is easy to see the importance of the numerous contrasts that the great variety of the stone before us offers to the architect.

In large cities the consumption of coal, particularly bituminous coal, by the numerous manufactories, the decomposition of organic matter, etc., generate gases that contain deleterious substances that are absorbed by the rain, fog and dew, and thereby deposited on the surface of the stone and taken into the pores. The conditions are then favorable for injurious action of the chemicals.

These destroying substances consist of sulphuric, muriatic, nitric and carbonic acids. They will soon disfigure the surface and edges of porous stone composed largely of the carbonates of lime and magnesia, and will ultimately destroy the stone, though the lime required to be so serious as to affect the stability of the work is usually beyond the lifetime of the building. Still, there are many examples where the delicate tracery of Gothic windows has been entirely eaten away.

For architectural work, the appearance of the stone is a matter of great importance.

1. The stone must weather well, or, however handsome it may be at the outset, the work will soon become very untidy and be seriously disfigured.

2. The stone should be free from soft spots, flaws, blotches, from any considerable quantity of iron, and from petroleum. The Buena Vista sandstone, used for the old Board of Trade and the Custom House buildings, contains, in many parts of the quarry, both iron and petroleum. The iron soon develops in large iron-rust spots, and the petroleum in great green spots that will ruin the appearance of any building. You all, doubtless, remember the old Second Presbyterian church that before the fire stood on the corner of Washington street and Wabash avenue. It was built of prairie stone, that is filled with petroleum, or allied substances, that the heat of the sun soon brings to the surface, where it collects the dust and soot and presents a very untidy appearance. It is surprising to see such stone used in a private city residence. It is, however, valuable for rustic work in parks or grounds.

Stones of a laminated structure should be built into the work so as to expose the edges and not the face of the laminæ to the weather, for if the face is exposed lamina after lamina soon scale off. The difference in strength is not great. Some experiments in England showed a loss of one-seventh inch by placing the strata vertical.

The numerous samples before me show that Chicago is very rich in varieties of building-stone. They come to us from the North, the South, the East, and the West; from Canada to Tennessee; from the coast of Maine to beyond the Mississippi; and represent every degree of hardness and softness, and every variety of texture and color.

The question, What stone shall be used? arises with every building erected. The appearance, after a few years' exposure, in the building should govern every choice. This can readily be learned after the stone has been used for some time in similar external conditions. But it often happens of late that new quarries are opened or stone presented in Chicago that heretofore has only been used in the country, and the architect must judge of the qualities of the stone for city use by an examination of a few specimens.

The atmospherical conditions in the country are very different from the city. For example, I examined the Bedford stone in a court-house in a small town near the quarry, built some ten years before. The stone was whiter than in the building near by that was just being completed. I also visited Louisville, and saw the same stone in some dwelling-houses in the residence quarter. Here the stone had a soft, light gray color, about the color of unbleached linen. I also examined the same stone in buildings in the center of the business quarter, where it was exposed to much smoke and dust, and here it was a very dark, cold gray, about the color of an old shingle roof after a rain. In the first two instances this stone presented a very handsome appearance, while in the last it was black, dingy and unattractive. The weathering qualities of this stone, as regards durability, were excellent in all three instances.

Speaking generally, in comparing stones of the same class, the least porous, most dense, and strongest, will be the most durable in atmospheres which have no special tendency to attack the constituents of the stone.

When we are forced to judge of the qualities of stone for building purposes from specimens only, we may acquire a certain amount of information from the following tests:

A recent fracture, when examined through a powerful magnifying glass should be bright, clean, and sharp, with the grains well cemented together. A dull, earthy appearance betokens a stone likely to decay.

Its resistance to crushing may be ascertained by crushing one-inch cubes. This test is of more or less importance, according to the use to be made of the stone, and in important buildings should certainly be approximately known. It is claimed by some authorities that it gives some idea of the ability to resist frost, but I think that this test is only valuable in comparing stones of similar character—sandstone with sandstone, etc.

An important test is to compare the new stone with a well-known similar stone by immersing the two, after thoroughly drying, in water for twenty-four hours, and weighing the stones, both before and after immersion. As a rule, the best stone absorbs the least weight of water. I find a table published with the South Kensington Notes on Building Construction: Good granite absorbs one-half per cent of water; indifferent granite absorbs one per cent of water; very bad granite absorbs three per cent of water; very durable sandstone absorbs eight per cent of water; moderately durable sandstone absorbs ten per cent of water; very bad sandstone absorbs twenty per eent of water; good limestone absorbs thirteen to sixteen per cent of water.

There is an examination known as "Brad's test." Small pieces are immersed in a concentrated boiling solution of sulphate of soda, and then hung up for a few days in the air. The salt crystallizes in the pores of the stone and sometimes forces off bits and even quite large fragments. Weigh the stone before and after the test, the difference gives the exact amount detached. The greater this is, the worse the quality of the stone.

The acid test consists in immersing the stone for several days in a solution of water to which one per cent of sulphuric acid and one per cent of H. Cl. is added. The effect on the stone, as compared with the effect upon a well-known stone of similar character, will give some idea of the power to resist a city atmosphere.

There is a test known as the C. H. Smith test: it is for the purpose of learning if the stone contains earthy or mineral matter easy of solution. Thoroughly wash and even soak the stone to be tested, and then chip off thin flakes of the size of a dime or a quarter of a dollar, and put them to soak in a glass, covering them with distilled water, and covering the glass to keep out any dust; allow the glass to stand quiet at least a half hour and then agitate by giving the glass a circular motion; decant off, and examine the water. If it is clear, it shows that the stone is highly crystalline and well cemented, but if the specimen contains uncrystallized substances or earthy powder, the water will be milky or turbid.

(*To be continued.*)

New York's Tallest Building.

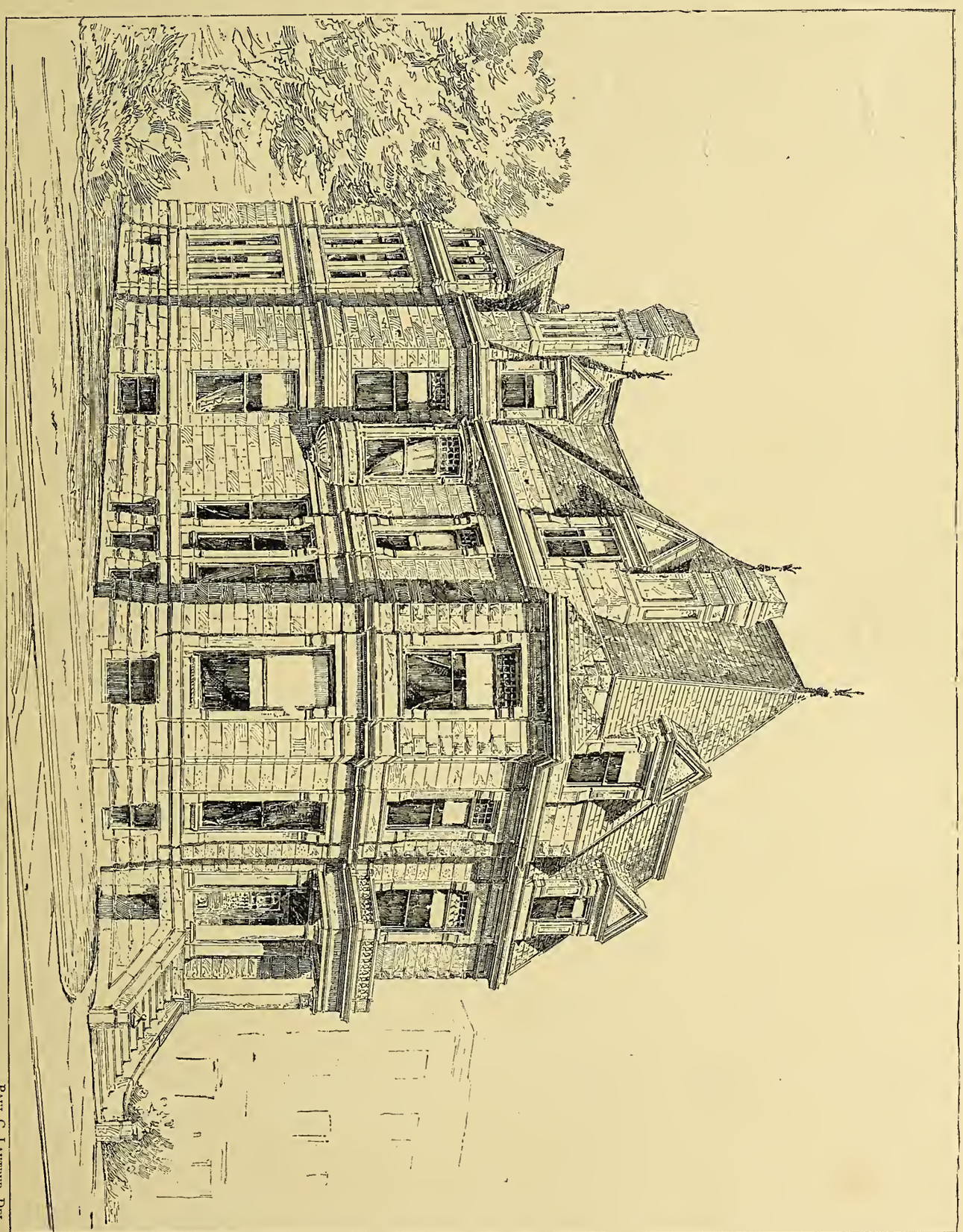
APPLICATION has been made to the Building Inspectors' department of New York city for a permit to construct an apartment-house at the corner of Seventh avenue and Fifty-seventh street, to be one hundred and eighty-two feet from curb to line of roof. The building will be *fifteen* stories high, and will have a cupola forty feet high on the top of the building, making the peak two hundred and twenty-two feet above the curb line, or only sixty-two feet lower than the spire of Trinity Church. The estimated cost of the structure is $650,000.

Our Illustrations.

Page 147. Residence for P. C. Hanford, Esq., to be built on Calumet avenue, near Twentieth street. The walls will be built of Connecticut brownstone, and the structure when completed will cost $40,000. In design, the exterior is extremely tasteful, and the owner's wish is to secure a thoroughly elegant and harmonious interior, all the details of which have not as yet been fully decided upon. The foundations have been commenced.

Page 145. Odd Bits from an Architect's Sketchbook, by F. Wm. Fieder, architect. Carved wood panel, hall mantel, in two designs, sideboard, etc., from original designs.

Page 143. Chicago Manual Training School, Twelfth street and Michigan avenue, S. S. Beman, architect. The main building is four stories and basement in height, with an extension of three stories. It covers about 100 by 80 feet, is built of pressed brick, and will cost $50,000.



RESIDENCE OF P. C. HANFORD, Esq., CHICAGO.—Jaffrey & Scott, Architects.

PAUL C. LAUTRUP, DEL.

Architectural and Building Notes.

ARCHITECTS O. J. PIERCE & SPEYER are planning a block of ten houses to be erected on Vincennes avenue.

THE latest work in stained glass by Messrs. Healy & Millet is that for the new Episcopal church at Ravenswood.

ARCHITECT GEO. H. EDBROOKE has plans for flat-building at 329 East Indiana steeet, for Mr. D. D. Fanning, to cost $12,000.

ARCHITECT H. REHWALDT has plans for a brick dwelling at 216 and 218 Ohio street, for Mr. H. Wedemeyer, to cost $10,000.

ARCHITECT GEO. LEHMAN is building a freight depot for the Cincinnati, Pittsburgh & St. Louis Railroad Co., to cost $20,000.

ARCHITECT S. V. SHIPMAN has plans for a flouring mill at 68–77 North Canal street, for Echart, Swan & Co., to cost $50,000.

ARCHITECT JAMES R. WILLETT has planned store and flat building at 2013–15 State street, for McKee & Tuphill, to cost $13,000.

ARCHITECT J. N. HILTON has completed plans for a flat-building at the northwest corner of State and Huron streets, for Mr. James Kirkland.

ARCHITECT W. H. DRAKE has plans for a brick and stone dwelling, to be erected at 3008–10 Calumet avenue, for Mr. C. D. Wetherell, to cost $25,000.

ARCHITECTS WHEELOCK & CLAY have plans for a residence, 30 by 54, two stories, basement and attic in height, with front of green-stone, rock-faced and laid irregularly, to cost $12,000.

ARCHITECT GEO. A. MASTERS is fast completing the reconstruction of the Lyceum Theater on South Desplaines street. The owner, Mr. Jos. Downey, is spending $50,000 upon the building.

ARCHITECTS BURNHAM & ROOT have made plans for a residence for Mr. Baldwin at No. 2925 Prairie avenue. It will be two stories and basement in height; front of Anderson pressed brick.

ARCHITECT J. C. COCHRANE has plans for a two-story residence, to be erected on Michigan boulevard, south of Twenty-fifth street, for Mr. Godfrey Snydacker, $40,000. Also a modern stable, to cost about $4,000.

ARCHITECTS ADLER & SULLIVAN have completed plans for a business and office block, 50 by 70, to be erected on the east side of Jackson street, between State and Dearborn streets, for Mr. E. L. Brand, to cost $15,000.

ARCHITECT S. S. BEMAN has drawn plans for a very handsome residence for Dr. F. Nelson, to be erected on Indiana avenue, near Twenty-sixth street. It will be of Anderson pressed brick with brown-stone trimmings, and will cost about $16,000.

THE *Inter Ocean* real estate man came out *strong* on the recent meeting of the Master Plumbers' Association of Chicago, in the issue of November 25. He not only gave the names of the members present at the roll call, but also a full list of the membership.

ARCHITECTS FURST & RUDOLPH have planned a schoolhouse 70 by 100 feet, containing twelve schoolrooms and one audience-room, to be built of common brick, pressed brick and stone trimmings, situated on Newberry avenue, near Twelfth street. Cost, $40,000.

THE belt courses of red terra-cotta around the new Commercial National Bank, and the other terra-cotta ornamentations furnished by the Perth Amboy Terra-Cotta Co. show well in connection with our western brick. It is of a solid and uniform texture, and has because of its excellent quality become a staple in the Chicago building material market.

ARCHITECTS BAUER & HILL have planned an emigrant hotel for the German Society for the Protection of Emigrants, to be built on Clinton street, between Van Buren and Jackson streets, 75 by 110 feet. The front will be a handsome one of stone for the first story, with the three higher stories of Chicago Anderson pressed-brick and stone trimmings. The work will not be commenced until spring.

A FINE sample of fireproofing is now observable in the new Board of Trade building, where the P. B. Wight Fireproofing Company are placing perhaps the largest contract for this material ever let in the West. Particularly interesting is the encasement of the mammoth wrought-iron columns, which support the tower, in light porous terra-cotta, a material that is light in weight, yet is almost a perfect nonconductor of heat.

ARCHITECT OTTO H. MATZ has let the contracts for three two-story-and-cellar stone-front buildings, one store, and five flats, on O'Brien near Union street, 60 by 50 feet, to cost $11,000. The interior finish is red oak. Mr. Matz is building on North State street, for Mr. John Huber, a two-story-and-basement brick building, 35 by 80, to cost $8,500, and is also letting the contracts for a three-story-and-basement brick building, stores and flats, on Ogden avenue, for Mr. William Burk, to cost $7,000.

THE Northwestern Terra-Cotta Co., of which Messrs. True, Brunkhorst & Co. are the proprietors, are not only the pioneers in the making of red terra-cotta in the United States, but are the first firm in the West to place a large sum of money in a plant, and employ first-class artist for designing. They also make buff and other colors in patterns unique and beautiful. The capacity enables them to turn out immense quantities of material which is largely in demand throughout the entire West.

THE Ottawa Tile Company have commenced supplying the hollow tile for arches of nine floors and the partitions of the Pullman office building and also for the furring of the outside walls. This company have been awarded the contract for the fireproofing of the new Sibley warehouse and the J. D. Parker office building, and the residence of Wilbur F. Story, on Grand boulevard, Hyde Park. The demand for fireproofing material is such that the enlargement of the plant at Ottawa is not too great to be run to its full capacity in the production of their excellent material, a fact that gives a positive indication of an increasing demand for fireproof buildings, both public and private.

THE building situation in Des Moines is illustrated by the following, taken from the *State Register*: "Three or four lonesome looking bricklayers were at work on the new Masonic building yesterday. The rest were standing about, or loafing at home, reading the President's message, and pondering over the stubbornness of contractors who will not pay more money for wages than they receive for their contracts." If Chicago bricklayers are foolish when they strike in the spring, what is the mental condition of those referred to who are striking at the end of the season?

THE Board of Managers of the World's Industrial and Cotton Centennial Exposition have adopted the design proposed by G. M. Jorgenson, architect, of Meridian, Miss., for the main building. It will be 1,500 feet long, 900 feet wide, with 1,000,398 square feet of floor space, including Music Hall in the center, with a seating capacity of 12,000 persons. The design also provides for main offices, telegraph office, newspaper department, fire department, police, hospital, waiting-rooms and life-saving apparatus. Ten plans were offered and three premiums awarded. The building will be the largest exposition building ever erected, except the one in London in 1862.

ARCHITECTS COBB & FROST have completed plans for an elaborate and picturesque residence for Mr. George C. Walker, of Chicago, to be erected at Geneva Lake, Wis. The house will be 60 by 80 feet, constructed entirely of wood, upon a foundation of rough boulders. It will be three stories high, but so designed as to give it a low, broad appearance. The structure will be sheltered by a high, steep roof broken by dormers and gables, and a large veranda will run around three sides of the first story. The same architects are building two houses for Mr. W. F. Myrick on Groveland Park avenue. They will be in pairs and will have unique and attractive cut-stone fronts, each 23 by 50 feet in size and two stories and basement in height.

THE American society of mechanical engineers were tendered a reception by the Yale & Towne Manufacturing Co. at their works at Stamford, Conn., on the 2d ult. This included a thorough inspection of the works, and the many mechanical productions of this company, which include some of the most remarkable inventions in the way of cranes, differential pulleys, scales, the bank and lock department, where perhaps the finest exhibition of timelocks in the world is made, and a special inpection of the huge testing machine owned by this company of 151,000 pounds capacity, the working of which was fully described to the visitors. A substantial lunch was served, and the occasion was one of great pleasure and profit to those of the engineering fraternity who were so happy as to have been in attendance.

PAUL C. LAUTRUP, whose reputation as an architectural designer and draughtsman is national, has turned his attention almost wholly toward water-color and black and white line perspective drawing. Artists who have seen Mr. Lautrup's water-color sketches pronounce them the highest of their class, and in line drawings his style is so distinct as to be readily distinguished from that of any other architectural draughtsman in this country. Mr. Lautrup has in hand a large amount of work for architects of distant cities as well as at home. The draughtsmen who do this class of work well being rare, and as it is not in demand except where the architect wishes to make a special exhibit of his plans, or for publication, it is much more convenient to engage one who is fully competent and who makes such work a business. Mr. Lautrup's office is at Room 33, 157 Washington street, Chicago.

ARCHITECT H. M. HANSEN has prepared plans for a block of five houses, two stories and cellar in height, fronts of Anderson pressed brick trimmed with stone and terra-cotta, to be erected on Clybourne avenue, between Perry and Cooper streets, for Mr. L. C. Stebbins. A double store and flat building, 50 by 70, four stories high, front of Anderson pressed brick with terra-cotta and cut-stone trimmings, to be erected at Nos. 1178 and 1180 Milwaukee avenue, for Mrs. L. Johnson. A flat-building, 22 by 45, three stories high, Anderson pressed-brick front, stone trimmings, for Mr. C. D. Meyer, to be erected on Delaware place, east of Rush street. Store and flats. 22 by 65, three stories high, front of Indiana pressed brick, cut-stone and terra-cotta trimmings, for Mr. John Clifford, to be erected at No. 351 East Division street, and a flat building, 24 by 45, for Mr. J. W. Rindt, on Lincoln near Belden avenue.

THE new rolling and pipe mills, which have been the principal object of interest at Kewanee, Ill., for the past few months, are now in successful operation. The dimensions of the rolling-mill is 75 by 200 feet, with an L 40 by 175 feet. Beside these there is a building covering the gas-producers, 40 by 150 feet, and another for the boilers, 40 by 110 feet. They are all heavy frame structures, covered overhead and on all sides with corrugated iron, which work consumed over forty tons of this material. The buildings complete cover an area of over two and one-half acres. The capacity of these works will approximate one hundred tons of pipe and tubes per twenty four hours, and will give employment to from one hundred to one hundred and fifty men and boys, which, in connection with the Haxtun steam heater-works department, will make a working force of over five hundred. The first iron was rolled on Wednesday, the 21st ult., and the pipe-mill is now in operation.

THE architects of Indianapolis held a meeting on the 6th inst., for the purpose of arranging to send applications for membership to the American Institute of Architects, with the ultimate intention of establishing a local chapter. The meeting was a decided success. The object of the meeting was brought forward by Mr. Wallingford, who has been a member for two years, and who called the attention of those present to the many advantages gained by such membership. For instance, in the Eastern cities the various chapters largely assist in forming building laws and arbitrating at competitions. The anuual conventions of the institute are rare architectural treats, while the local meetings for discussions of various problems will promote a better general feeling in the profession. The following applications were sent on by Mr. Wallingford: B. H. Enos, Charles Mueller, J. H. and A. H. Stem and E. J. Hodgson. Several others will follow.

Lumber Notes.

THE product of the Chippewa is estimated at 130,000,000 feet.

THE Minneapolis mills, up to November 1, cut this season 302,151,300 feet.

WITHIN three years the number of sawmills in Arkansas has increased from 319 to over 1,200.

LEADING Canadian lumbermen are seeking to obtain a bounty on manufactured lumber to the United States.

A TRACT of 1,840 acres of pine-land in Clark county, Wis., was sold to a lumber company at La Crosse for $68,000.

IT is stated that there will be fully 100,000,000 feet of logs in the Menominee, Wis., boom at the close of the season.

THE total number cut of Duluth mills amount to about 175,000,000 feet with some 50,000,000 feet of logs hung up in the streams.

FOREIGN capitalists have just bought a large tract of timber-land, in southeastern Arkansas, said to contain 460,000,000 feet of timber.

THE F. & P. M. railroad has hauled to the Saginaw river this season, up to October 1, over 40,000 carloads of logs. This constituted 1,400 trains.

THE stock of American walnut in England, at latest advices, was reported as large, and mostly held at high price. Few recent transactions have taken place.

THE amount of lumber shipped from the Saginaw river the present season up to the present time will not vary much from 75,000,000 feet short of that of last year.

MR. E. RICE, of the Big Falls Lumber Co., Stanton, Mich., who owns 60,000,000 feet of pine on Jump river and is about to sell it to the Dalles Lumber Co., of Eau Claire.

THERE has been rafted out of the Beef Slough, on the Mississippi river, this year 440,000,000 feet of logs, which is the largest amount ever rafted out on any previous year. There are yet a number of logs remaining in the slough.

A MICHIGAN lumberman, who recently looked over the redwood belt of California, says that he measured one tree that was 375 feet long, and saw plenty of them that were 300 feet high. He saw the logs cut from one acre that scaled 1,000,000 feet, and from fifteen acres were taken 12,000,000 feet.

THE Mexican government has contracted with Mr. Oscar A. Droege to plant 2,000,000 trees in the valley of Mexico within four years, from March 15, 1884—500,000 a year, in such places as the government shall choose. The contractor pledges himself to establish a number of nurseries and to have in them each year at least 800,000 ash, 35,000 willows, 120,000 poplars, 60,000 eucalyptus trees, 60,000 trœnosjapones, 60,000 mountain cypress cedars, 60,000 acacias, and 120,000 of miscellaneous varieties. The trees must be in plantations of from 50,000 to 100,000 each, and Mr. Droege has to maintain them for two years after planting. He is not compelled to plant trees along the highways, however. Three graduates of the school of agriculture are to be received into the nurseries each year, there to study the science of forestry. He is also to raise fruit and other useful plants for free distribution. There is to be translated from the German every year a work on arboriculture of recognized merit. An inspector is to superintend, and Mr. Droege is to receive annually $40,000 (£8,500) till the sum reaches a total of $200,000 (£42,500).

New Publications.

A MANUAL FOR YOUNG ARCHITECTS, STUDENTS, AND OTHERS INTERESTED IN BUILDING OPERATIONS. By T. M. CLARK. J. R. Osgood & Co., publishers.

This is a well written, concise treatise on building as it is carried on at the present day, and fills a niche in agricultural literature so admirably, that students, and others not professional architects, but called upon to direct building operations, will be glad to possess.

PRACTICAL GEOMETRY. By JAMES A. MONCKTON. W. T. Comstock, publisher, 6 Astor Place, New York. $1, bound in cloth.

This work is a series of lessons beginning with the simplest problems, and in the course embracing all the geometry likely to be required for the use of every class of mechanics, or that are needed for instruction in mechanical schools.

ARCHITECTS' AND BUILDERS' POCKET COMPANION AND PRICE BOOK; consisting of a short but comprehensive epitome of decimals, duodecimals, geometry and mensuration; with tables of U. S. measures, sizes, weights, strengths, etc., of iron, wood, stones, brick, cement and concretes. Quantities of material are given, sizes and dimensions of wood, brick and stone; and full and complete bills of prices for carpenters' work and painting; also rules for computing and valuing brick and brickwork, stonework, painting, plastering; with a vocabulary of technical terms, etc. By FRANK W. VOGDES, architect, Indianapolis, Ind. Enlarged, revised and corrected. Philadelphia: Henry Cary Baird & Co., 810 Walnut street. Price $2. Sent by mail free of postage to any part of the world.

This work has been known to architects and builders for some years past, and this new and revised edition now brought out will be highly appreciated.

THE ART INTERCHANGE. WM. WHITLOCK, publisher, $3 a year, 140 Nassau street, New York.

The Art Interchange for November, 1883, has, besides its very valuable and serviceable Notes and Queries, two designs — Phlox and Pinks — for china painting; an embroidery design for a cushion from the Royal School of Art Needlework, South Kensington; an Althea design for vase decoration; several designs for drawn-work and for stained-glass decoration. Mr. W. H. Eggleston, Jr., a practical artist and designer in Mosaic Glass, contributes a paper on the subject, and there is a practical elementary article on Hammering Brass — the kind of home art work now uppermost in interest. In the next issue a number of designs for Brass Hammering and Sketching on Linen will be given. The prize literary questions, under which the current novel of the "Bread Winners" was so interestingly discussed, are continued by the propounding of two more Open Questions, taken from Mr. Howell's "A Woman's Reason." For these a similar prize is offered.

The Art Interchange is published fortnightly, at $3 a year, by Wm. Whitlock, 140 Nassau street, New York.

CHICAGO STREET FRONTS. Illustrated by a set of thirty photographs. Published by J. W. Taylor, 146 La Salle street, Chicago. $12 per set.

In reviewing this set of photographs it is hard to speak of them in proper terms, because of their obvious superiority in a photographic sense to almost every other similar attempt to illustrate street architecture. Besides being excellent prints, marvelously clear and sharp of outline, the line of perspective is exceedingly well chosen, and each front gives to the beholder all that was intended to be presented. As a piece of mechanical work, they will compare favorably with the best, while from the standpoint of enterprise Mr. Taylor is to be greatly commended in securing for public view the best architecture our city can boast of and hold it before the eyes of the youth of the profession, and bid them observe and profit by those forms and examples that have been born of the genius that crowns the architectural profession. Mr. Taylor deserves well of the profession for placing in their hands so valuable a collection of architectural photography. Two new sets of views are promised in the near future.

CATALOGUE AND PRICE-LIST OF KEUFFEL & ESSER, IMPORTERS AND MANUFACTURERS OF DRAWING MATERIALS, NEW YORK, 1883. Seventeenth edition. 127 Fulton street, and 42 Ann street, New York. Price fifty cents.

The well-known and popular drawing-material house of Keuffel & Esser, of New York, whose peculiar griffen-head and claws trademark is stamped upon most of the drawing-instruments and paper now in use, have issued an unusually handsome and complete catalogue containing cuts and descriptions of almost every instrument used or known to the architectural or engineering draughtsman. So noted has the annual catalogue issued for almost two decades by this firm become, that this year they were compelled, at undoubtedly enormous expense, to procure new cuts because of the copying of them by other houses in the same line of trade. The cuts represent clearly the goods manufactured by Keuffel & Esser, and should materially aid in the selection of drawing materials. The house which this mark represents is probably the largest, best known and popular of their line among the architectural and engineering professions, and long trial has given their goods so enviable a reputation for correctness and practical utility that they compete successfully with any others, domestic or imported. The catalogue also shows a long list of drawing papers, the Paragon, Universal and Duplex being the special brands manufactured. The different departments of the house are arranged throughout systematically, and as a thorough exposé of the facilities and resources of the celebrated house of Keuffel & Esser, this catalogue is perfect, while typographically it is clear, concise and pleasant to the eye, the cuts being of unusual clearness and artistic in arrangement. In Chicago catalogues can be procured from Gustav Hinstorff, 48 Dearborn street, who represents Keuffel & Esser by making a specialty of their goods. Messrs. Keuffel & Esser deserve the congratulations of the trade upon their catalogue for 1883–4.

The Builders' Weekly Reporter, London, Eng., is a most welcome visitant to our sanctum. Devoted to architecture, engineering, sculpture and the decorative arts, it affords a comprehensive view of what is going on in the world in these several specialties, particularly in the Old World. It is edited with marked ability, and deserves the high place universally accorded to it. We are largely its debtor.

The Georgia Capitol Competition.

Editor of Inland Architect and Builder:

DEAR SIR,—In an article on the "Georgia Capitol Competition" in the November number of the INLAND ARCHITECT, we think that you do architects great injustice, when you state that they can prepare such drawings as are required by the Capitol Commissioners for the sum of $1,200 or $1,500, when every architect very well knows that it will cost him ten times that amount when properly done. Such statements do architects great harm, especially when made in the editorial columns of an architectural journal, in leading people to believe that architects' profits are enormous at the regular rates; and so they would be, were such statements correct; for take this one case, which at two or three per cent, the lowest rates, amounts to $16,000 or $24,000, which only cost him $1,200 or $1,500 to earn, and on this basis the Georgia Commissioners are offering reasonable compensation for their designs, barring the competition.

Hoping that you will do the profession justice in the future and make ample atonement for this one error, we remain,

Yours truly, CAUKIN & RAE.

When the editorial in question was written it was intended to refer simply to the preparation of exterior plans, such as are called for in the first two articles of the invitation, and referred to mere outline sketches, such as are usually sent in in response to competitive invitations. The utter absurdity of the demand set forth in the remainder of the "invitation" would preclude all serious attention to it, for no architect would go to the expense involved in preparing detail plans and estimates of material involving a cost of from $24,000 to $36,000 upon the simple invitation of a state or county board, and in the face of "any or all plans rejected." Our friends are quite right in calling our attention to the matter, but are assured that it is as impossible for to secure full detail plans, specifications and estimates upon labor and material for the same, in response to "invitations to architects," as it should be to secure drawings of any sort in such cases from reputable architects.—[ED. INLAND ARCHITECT AND BUILDER.

Synopsis of Building News.

Bloomington, Ind.—The outlook for the coming season is beyond precedent. More work is projected than can possibly be done with present facilities. There has been destroyed by fire something over $325,000 worth of buildings, which adds to the prospect for a very lively "boom."

Architect Jno. Link: Bady Bros., two frame dwellings, 30 by 40 feet, cost $1,000 each; A. Robinson, contractor. American Roof Co., frame factory with tin roof, 132 by 100 feet, cost $3,000; J. Williams, contractor. J. R. East, two-story fiame dwelling, 36 by 57 feet, cost $2,000; A. Robinson, contractor. Samuel Smith, two-story frame dwelling, 40 by 45 feet, cost $2,600; H. J. Nichols & Son, contractors. T. H. Sudbury, two-story brick marble-shop, tin roof, 25 by 85 feet, cost $3,000; same contractors. All of the above under way. N. N. Hill, two-story stone business-house, 40 by 100 feet, cost $10,000; projected.

Chicago, Ill.—Every advantage is taken of the open winter and building seems as active as in the summer season. Many buildings that were projected for next spring are already under way; and if the favorable weather continues many new foundations will be put in and the superstructures carried up to, or toward, completion. So much activity prevails, our architects have neglected us for this month.

O. J. Pierce & Spenser, Architects: Union Mutual Life Insurance Co. of Maine, ten three-story bricks with stone trimmings and slated towers, 18 feet 9 inches by 58 feet, seven on Vincennes avenue, two on Oak avenue, and one corner of Vincennes and Oak avenues; aggregate cost, $50,000; contracts being let.

Architects Furst & Rudolph: For Richard Healy, block of two stores, with flats above, basement, three stories and attic high, on the northwest corner of Archer avenue and Main street; cut-stone front; cost $20,000. Mrs. C. Sullivan, store with flats above, basement and three stories high, on West Twelfth street near Jefferson; cost $10,000. D. E. Healy, store with flats above, basement, three stories and attic high, northwest corner of Archer avenue and Fuller street, pressed brick front and stone trimming; cost $12,000. William Fleming, block of four-flat buildings, cellar and three stories high, 100 feet front, Morgan street, near Van Buren, pressed brick front, with stone trimmings; cost $30,000. J. J. Cohen, block of three apartment houses, basement and three stories high, each house arranged for two families, northwest corner of Wisconsin and Lonergan streets, cut-stone front; cost $32,000. Louis Schumacher, flat-building three stories high, Morgan street, near Blue Island avenue, pressed brick front and cut-stone trimmings; cost $6,500. E. A. Saalfeld, three-story flat-building, Garfield avenue, near Orchard street, Anderson pressed brick front, with cut-stone trimmings; cost $8,500. J. H. Haaker, a flat-building, three stories high, Ontario street, between Wells and La Salle, pressed brick front, with stone trimmings; cost $7,000. Jacob Hissler, store with flats above, three stories and basement high, State street, between Thirty-fourth and Thirty-fifth; cost, $10,000. John Dahmke, block of two stores, with flats above, basement and three stories high; also ice and smoke houses, West Lake street, near Western avenue; cost $22,000. F. W. Weber, block of ten stores, with flats above, basement and three stories high, Halsted street, near Twelfth, pressed brick front, with stone trimmings; cost $17,000. Henry Gnadinger, block of three stores with flats above, basement and three stories high, West Twelfth street near Loomis, Anderson pressed brick front with cut-stone trimmings; cost $25,000. Anton Ruep, flat-building, basement and three stories high, Groveland Park avenue, near Twenty-ninth street; cost $7,000. Adolph Ober, two dwelling houses, basement, two stories and attic high, corner of Fulton street and Oakley avenue; cost $12,000. E. R. Schall, block of three dwelling-houses, basement and two stories high, 75 feet frontage on Prairie avenue, near Thirty-third street, cut-stone front; to cost $13,000. A. Hottinger, flat-building, four stories and cellar high, Sedgwick street, corner of Sullivan, cut-stone front; to cost $14,000. C. F. Blaul, three-story flat-building with addition to adjoining two buildings, Desplaines street, near Depuyster; to cost $12,000. Henry Furst and Peter Neu, block of two flat-buildings, cellar and three stories high, brown-stone fronts, West Congress street, near Loomis; also two barns for same parties; entire cost $22,000. Mrs. M. Gail, residence on Michigan avenue near Sixteenth street, basement and two stories high, pressed brick front, stone trimmings; to cost $8,500. William Henneberry, residence on West Jackson street, basement and two stories and attic high, cut-stone front, with mansard roof; to cost $12,000. Jacob H. Beidler, building for manufacturing purposes, basement and four stories high, 150 by 75 feet, Waldo place, between Union and Halsted streets; to cost $25,000. Horn Bros., furniture factory, 42 by 130 feet, basement and four stories high, with engine and boiler rooms, West Superior street; cost $11,000. Theo. A. Kochs, manufacturing building, basement and four stories high, northeast corner Wells and Erie streets; cost $20,000. John Kummer, residence, northwest corner Ashland avenue and York street, basement and two stories high, cut-stone front; cost $11,000; also barn for same; cost $1,800. John Corliess, residence, Ashland avenue near York street, basement and two stories high, cut-stone front; cost $10,000. St. Franciscus Catholic Congregation, the Rev. F. Kalvalage, pastor, a schoolhouse 70 by 130 feet, basement and three stories high, arranged for twelve school-rooms and one large audience room in upper story; to be faced with common brick, trimmings of cut-stone and pressed brick; the building is being built on Newberry avenue, near Twelfth street, and when completed will cost $40,000.

Cincinnati, O.—The present condition of building is good and the outlook quite encouraging.

Architect Geo. W. Rapp: Felix Bahlmann, two-and-a-half-story brick dwelling, 60 by 35 feet, Woodburne avenue, Walnut Hills, cost, $9,000; Kemme & Rosentiel, contractors. Louis Ballauf, two-and-a-half-story brick building, slate and tin roof, 43 by 63 feet, cost $10,000; Walnut Hills Club, one-and-a-half story frame, composition roof, parlors, billiard-room, bowling alleys, etc., cost $4,000, Kemme & Rosentiel, contractors.

Denver, Col.—The building status is good and the prospect for the coming season is very encouraging. During September sixty-two building permits were granted of value, $199,475, and in October fifty-seven were issued, representing $100,660. The most important of the buildings were: L. J. Laws, two-story brick dwelling, 30 by 60 feet, on Grant avenue, cost $8,000; E. P. Brink, architect. Denver street Railway Co., four-story brick stable and car barn, 100 by 125 feet, on seventeenth street, cost $50,000; J. W. Roberts, architect. Henry Gebhart, two-story and basement brick dwelling, 40 by 65 feet, on Downing avenue, cost $8,000; E. P. Brink, architect. Campbell, Rusk & Forman, three frame and one brick dwellings, foot of Thirty-first street, cost $25,000: Harvey & Washburne, builders. R. A. Long, double two-story brick dwelling, 47 by 60 feet, cost $8,000; F. E. Edbrooke & Co., architects. Dr. Wagner, three-story and basement brick store building, 25 by 60 feet, and two-story brick shop, 25 by 25 feet, on Larimer street, cost $7,000; Wm. Fuayle, architect. Mrs. Roach, two-story brick store block, 44 by 61 feet, on Larimer street, cost $8,000; J. H. Littlefield, architect. T. M. Patterson, additions and alterations to residence, corner of Walton and Seventeenth streets, cost $6,000; R. S. Roechlaub, architect. Belmont & Hanson, roller-skating rink, one story brick, 63 by 149 feet, Sixteenth street, cost $8,000; F. E. Edbrooke & Co., architects. Adaline Rusk, two-and-a-half-story brick dwelling, 35 by 70 feet, and one-and-a-half-story brick barn, 25 by 35 feet, Sherman avenue, aggregate cost $17,500; same architects. A. T. Lewis, two-story block of eight stores, 35 by 125 feet, sixteenth street, cost $10,000; Truesdell & Co., architects.

Architects Seely & Hall are building an $8,000 Masonic Hall at Longamont, Col.; Architect R. S. Roeschlaub has completed the plans for a school-building at Colorado Springs, Col., to cost $15,000; Architect J. M. Nichols is engaged on the plans for a M. E. church building to cost $100,000.

Des Moines, Ia.—The building prospect for 1884 promises as much or more activity than that of 1883. Some sixty or seventy business houses will be built besides and much other building. A $400,000 hotel is a sure thing, and three or four churches, two schoolhouses and several French flats are about settled upon. The general outlook for the entire state is good. Architects already have considerable work in their offices for spring projects, embracing stores, office-buildings, tenement houses, etc.

Architect C. H. Lee: For E. F. Dick, three-story and basement brick, stone trimmings, slate and tin roof, 22 by 132 feet, cost $20,000; H. C. Hanson, three-story and basement brick and Asbestine stone, Asbestos roof, 40 by 107 feet, cost $22 000; Dakota Territory, Agricultural College building, four stories, brick with stone basement, 68 by 80 feet, cost $30,000; Guthrie Co., Ia., courthouse, three-story, brick veneer with slate mansard, 58 by 78 feet, cost $21,000; Independent School District, Panora, Ia., two-story brick veneer school-building, slate roof, 62 by 65 feet, cost $9,600 (the above just completed); Independent School District, Gilbert, Ia., one-story school-building, stone and brick walls, slate roof, 38.6 by 40 feet, cost $2,250; Independent School District, Grant, Ia., school-building, brick and stone walls, slate roof, 34.6 by 29 feet, cost $1,965 (nearly completed); Odd Fellows, two-story and basement, frame hall, with stores, 24 by 60 feet, cost $2,340 (under way); Citizens and A. F. M., Oakland, Ia., two-story town hall and lodgeroom, 30 by 70 feet, cost $3,500; Geo. W. Jones, double brick tenement house, three stories, 43 by 60 feet, cost $5,000 (projected).

Architect W. L. Plack: For W. S. Pritchard, three-story brick building, front Chicago pressed brick, terra-cotta trimmings, stores and offices, 22 by 132 feet, cost $15,000, E. G. Kimble, contractor (almost completed); S. B. Gaston, three-story brick building, front Chicago pressed brick, galvanized iron trimmings, stores and offices, 20 by 80 feet, cost $7,000, Hermann Hand, contractor; A. T. McCarger, frame cottage with tower and verandas, cresting and finials on roof, 28 by 43 feet, cost $3,000, F. S. Whitney, contractor; H. C. Senteny, Queen Anne cottage, frame, 25 by 38 feet, cost $2,100, Poulson & Willetts, contractors (above just completed); Syndicate Block, three-stories high, brick trimmed with stone, quite elaborate, six stores and offices, 80 by 120 feet, cost $37,500, W. Christy, John Bailey and Seaver & Co., contractors (nearly completed); Wesley M. E. Church Society, one-story brick, ampitheater seating groined arched ceiling, exterior tirmmings, galvanized iron and artificial stone, 70 by 116 feet, cost $20,000, Louis Sommar, contractor; Percival & Hatton, French flat, four stories, Chicago pressed brick with brown-stone trimmings, fourteen oriel windows, 45 by 88 feet, cost $27,000, L. A Robertson and S. C. Wherry, contractors (above ready for roofs); Geo. Garver, additions, remodeling and new roof to three-story brick, 45 by 62 feet, cost $2,700, A. Olcson, contractor; W. H. Dickenson, remodeling interior of frame residence in mahogany and oak, cost $3,200, E. J. Kimble, contractor (above under way); C. W. Pitcairn, block of two-story tenement buildings, pressed brick, stone trimmings, plate glass, cost $12,000, John Bailey, contractor (material on the ground).

Kansas City, Mo.—Work is still going on, and the outlook is good. There are twenty-five architects in Kansas City, and none complaining.

Architect L. L. Levering: H. H. Lyman, two-story eight room residence, brick, cost $2,600; W. H. Strayer, two-story nine room residence, brick, cost $5,000 (done by the day and nearly completed); A. B. Mathews, brick addition to residence (nearly completed), cost $3,500; B. M. Brake, two-story eight-room residence, brick, cost $2,500 (just completed); Christian Society, church-building, brick, with stone trimmings, basement with auditorium, provincial spire 183 feet high, 105 by 60 feet, cost $36,000 (will be completed by January 15). With the exception of the church, above was November work.

Louisville, Ky.—Outdoor business about closed for the season. The outlook for business the coming season is highly encouraging.

Architects McDonald Bros.: Clinton, Hickman Co., court-house, three-story brick and stone, fireproof offices, 65 by 79 feet, cost $22,000; J. M. Cosley, contractor. John Coputon, four-story building, pressed brick and stone, stores and flats, 116 by 71 feet, cost 33,000, let in detail. (Above under way.) Robert Otter, brick dwelling, cost $7,500. J. F. Calloway, pressed brick dwelling, cost $8,500. (Above just completed.) Williamsburg, Shelby Co., court-house, cost $20,000. (Being got ready.) Southern Exposition Building, 920 by 620 feet, cost $209,000. (Finished during the summer.) Princeton, Gibbon Co., Ind., court-house, stone, terra-cotta and pressed brick, fireproof throughout, 90 by 120 feet, cost $120,000; J. G. Miller, contractor. Lawrenceburg, Ky., jail, stone and steel, cost $8,000. Mt. Sterling, Ky., jail, stone and steel, cost $10,500.

Minneapolis, Minn.—Notwithstanding the lateness of the season, during November quite a number of new buildings were under way, as if the building "boom" of the year was disinclined to submit to the inevitable, is yielding to the foregone certainty that 1884 will be more remarkable in the number and cost of buildings than even this thrifty season has been. All architects and builders are in elated spirits over the prospect held out by the coming year. The following is the *status* of the month just gone, from the 11th to the 30th, relative to the buildings under way:

Wm. Duhukes, residence, cost $6,000; E. Patton, house, cost $1,800; M. Devereaux, dwelling, cost $2,500; Jo. Graves, double house; J. P. Keller, store building; Richard Pew, dwelling, cost $1,500; Jno. Fleetham, dwelling, cost $5,000; Byers & Augurs, new brickworks, 66 by 30; D. Mahone, house, cost $3,000; H. H. Bradwell, house, cost $2,000; H. R. Puryson, house, cost $2,000; McMillan & Hastings, house, cost $2,000; M. Mahn, house, cost $1,500; E. Eichhorn, double tenement, cost $4,000; Mrs. Lemers, double house; J. P. Just, dwelling, cost $3,000; E. Brosins, two-story brick bakery, cost $3,500; L. F. Menage, two three-story frame; J. H. Rowell, two-story frame store-building; H. W. Smith, two-story frame store-building; E. B. Wakenau, double house, frame; J. C. Clifford, dwelling, cost $3,000; C. C. Clendenin, dwelling, cost $2,500; W. W. Whitmore, dwelling, $3,000; U. Thomas, two stores; R. F. Farrington, double house; G. F. Bockas, dwelling, cost $2,500; Herman Westfal, large icehouse; D. K. Adams, dwelling, cost $3,000; H. L. Swan, dwelling, cost $3,000; Chas. Robedean, dwelling, cost $4,000. The armory was in the plasterer's hands, the West Hotel nearly under roof, and the Chamber of Commerce slated. Among the prominent projected buildings, already on the *tapis*, are: block of houses for C. A. Burney, red brick, brownstone and stucco work, cost $12,000; jobbing-house building for W. E. Steel, cost $20,000; double tenement for F. McDonald, cost $5,000; a 1,000,000 bushel elevator for the Minneapolis Elevator Company, cost $125,000.

Richmond, Va.—The outlook for winter work is poor, but more encouraging for next spring.

Architect Geo. C. Moser: C. E. Whitlock, alterations on three-story store-building, new front, pressed brick, Barea-stone trimmings, galvanized iron cornice, terra-cotta panels, etc., cost $6,000. (Out for bids.) Chas. H. Talbott, block of three three-story and basement houses, pressed brick and Portsmouth stone, peerless brick belt, terra-cotta panels, etc., 84.5 by 98.5 feet, cost $28,000; contractors, Jas. Fox, Ellis Redford and A. F. Brown. (Under roof.) B. Samuels, alterations in three-story store front, pressed brick, Barea-stone and galvanized cornice, cost $6,000. (Projected.)

St. Paul, Minn.—Season about closed; prospects for next year indicate the buildings will be more of a commercial character than for the past season, and the amount to be expended promises to exceed the expenditure of 1883.

Architects Carpenter & Foltz: Chamber of Commerce, six stories, pressed brick fronts on two sides, stone trimmings, 50 by 130 feet, cost $90,000. Capitol Bank, six stories, Philadelphia brick and granite front, fireproof throughout, cost $60,000. C. Egleston, Lakeside cottage, two stories, frame, 30 by 42 feet, cost $4,000. Wm. Hanson, two-story frame cottage, 30 by 32 feet, cost $3,000. (All of the above projected.)

Architect S. Walter Stevens has just completed for H. E. Thompson the plans for one of the most notable buildings yet erected in St. Paul. It will have a combined frontage of nearly 500 feet, and an altitude of four stories. The first story will be divided into fifteen stores, each with the best glass fronts yet seen in the city. The upper stories will be divided into suites of living apartments, provided with all modern improvements. The building will be heated with steam throughout from boilers placed in another building. Hot and cold water will be carried over all the floors, and elevators connect the various floors in addition to the staircases. The building will be thoroughly fireproof, besides provided with fire-escapes, standpipes, etc. etc.

The plans for the new Capitol bank building have been accepted, and the architects have been given liberty to make it the handsomest building in St. Paul. The building is to stand between the Gilfillan block and the Merchants, fronting thirty feet on Jackson street and running back ninety feet, and will be six stories in height, rising ten feet above the Gilfillan block. The material for construction will be Philadelphia pressed brick. The trimmings will be of quartz jasper and a fine quality of granite.

ARCHITECT JOHN C. COCHRANE has been engaged by the commissioners of Will county, Ill., to erect a county court-house.

ARCHITECT W. W. BOYINGTON was called to Madison, Wis., by the governor and capitol building commissioners and given full charge of the rebuilding of the south wing of the capitol, which recently collapsed, and the reconstruction of the north wing, which is in an unsafe condition.

T. L. JOHNSON, the popular representative of Keuffel & Esser, of New York, reached home just in season to eat his Thanksgiving turkey, after a very successful and thorough trip through the Western States.

ASBESTOS has, through the earnest efforts of reliable manufacturers and the coöperation of intelligent architects, become a large factor in the fireproofing of buildings. The H. W. Johns Manufacturing Co., who are the largest and best known makers of this material, are placing their building felt in some of the largest structures now under way. In Chicago the floors of the mammoth warehouse being built for the National Tube Works Co. are all being laid with the H. W. Johns Manufacturing Co.'s asbestos, and the new depot for the Western Indiana Railway Co. is lined with this excellent material.

The Inland Architect and Builder.

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THE

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NOWHERE, perhaps, in the line of official duty, do reputable men, with a standing in business circles that is unimpeachable, commit such egregious errors, and throw their actions open to the imputation of bad faith and unbusinesslike proceeding, as when, as public commissioners, they send out to the architectural profession the popular "invitation for competitive plans," samples of which have so many times been printed and criticised in these columns, and always pregnant with the spirit of a first-class lottery scheme, in which the chances are all against the investor. But such is the fact, and the history of architectural competitions in the United States contains many rich specimens of this class of effusions, showing a most lamentable ignorance of the whole subject, and displaying that miserable, short-sighted and ill-advised policy of endeavoring to put the competing architects to all possible trouble and expense, guaranteeing absolutely nothing in return, ending sometimes in disaster, with loss of life, and always in disappointment, extravagance, and in the regret that all of our finest opportunities for embellishing our cities with architectural constructions of which every citizen would be proud, is frittered away by an apparently ignorant and conceited building committee, with not enough sense either to profit by the errors of the past or to seek advice from that only legitimate source, the architectural profession, thoroughly reliable members of which can be found in every large city.

TO again illustrate how stupid and unbusinesslike these "invitations" are, we quote the following from Indianapolis, which is entitled "Instructions to Competing Architects."

OFFICE OF MARKET HOUSE COMMISSIONERS,
INDIANAPOLIS, December 26, 1883.

Plans and specifications with estimates will be received until two o'clock P.M. February 20, 1884, for new city buildings to be erected on the site known as the East Market Place, on the north side of Market street, between Delaware and Alabama streets. A topographical map of the ground may be seen in the office of the city civil engineer.

The proposed main building is to be used as a market house, with a city hall above, with proper ante-chambers attached. The first, or market story, is to be fifteen feet in height, commencing three feet below the grade of the sidewalk. An adjoining market house on the east end of this main building to be one-story high, at a suitable grade above the sidewalk, the walls and supports to be built of brick and iron, with a slate or tin and glass roof, to be thoroughly lighted and ventilated. The market house floors are all to be of concrete.

The outside walls of the main building shall be built on a bed of concrete, with stone in foundations up to the base course or water table line, the stone to be taken from the St. Paul, Sherwood or North Vernon quarries, or other Indiana stone of equal quality. The superstructure to be of brick with stone or terra-cotta trimmings. If stone, oölitic limestone shall be used for this part of the building. The roof to be covered with slate, with galvanized iron cornices.

Arrangements shall be made for heating with steam, ventilating according to the latest improved methods, lighting by electricity and gas, and for water supply to all parts of the building. A basement for storage rooms and heating apparatus shall be provided.

The main hall must be provided with galleries and have a total seating capacity of about six thousand. All drawings of plans of the several stories, roof, exterior elevations and sections, to be made to a scale not less than one-eighth of an inch to the foot, and larger where possible to make them. Colors shall be used to designate the different materials. Perspective drawings shall be made showing a view of the building from a southwest direction, and the plans shall clearly set forth the different parts of the building.

The following drawings of the main building are required: 1. Plan of foundation. 2. Plan of each of the several stories. 3. Plan of the roof. 4. Plan of east and west ends and south side elevations. 5. Traverse and longitudinal views, together with any further plans or sections which may be necessary to elucidate the interior and exterior construction. Also, a block plan showing the location of the building on the site. Any and all drawings necessary to exhibit the detail of construction, shall be to a scale of not less than three-fourths of an inch to the foot.

The following plans are required for the outside one-story market house: 1. Plan of foundation and supports. 2. Plan of roof. 3. Elevation showing the south and east fronts.

Drawings must be left at the mayor's office in the court-house at the time designated. Architects must limit the cost of the buildings complete to one hundred and fifty thousand dollars, furnish a bill of quantities, and confine their estimates to ninety (90) per cent. of that amount.

Any further information which architects may require will be furnished by the commissioners.

The plans will be examined by the commissioners and the city engineer. They will make a thorough examination of and test the estimates submittted, and if they shall find them correct, that the building contemplated in such plans can be constructed within the amount given; is suitable in all respects as to permanence and convenience; is adapted to all the purposes and requirements of a city hall, with proper ante-rooms and a market house; that the materials to be used shall be in texture and quantities such as to insure, stability and endurance, and that the architectural symmetry and ornamentation are in harmony with each other, then the commissioners may select two plans which to them may seem most meritorious, and afterwards shall classify the two so selected as No. 1 and No. 2. For the two plans so selected the city of Indianapolis will pay the following premiums:

For plan No. 1, four hundred dollars. For plan No. 2, two hundred dollars. And said plans shall become the property of the city.

Should the city, through its common council and its board of aldermen, decide to build and adopt one of the plans selected by the commissioners, a contract will be made with the architect whose plan is accepted, such contract to be subject to the approval of the council and board of aldermen. The compensation to be paid said architect shall not exceed three (3) per cent. of the entire cost of the buildings, for all plans, specifications, details, and supervising, from which per cent. shall be deducted the amount paid as a premium for such plan. It must be distinctly understood that in no event will the architect be allowed any percentage, or other compensation, on any excess of cost over one hundred and fifty thousand dollars.

D. W. GRUBBS, J. H. BALDWIN,
J. T. LAYMAN, JOHN COBURN,
W. F. A. BERNHAMER, V. T. MALOTT,
S. H. COBB, T. O. MORRIS,
THOS. TALENTIRE, JOHN R. PIERSON,
ISAAC THALMAN, JAS. RENIHAN.
SIMEON COY,

} Commissioners.

THERE is but one legitimate object in a competition, and that is to enable the committee to choose the architect who, for a given expenditure, produces the most appropriate building. To this end preliminary studies, with an estimate based upon the cubical contents of the proposed structure, is all that is necessary to enable professional experts to select two, three or more competitors, who should be paid a fair compensation for developing their designs. If estimates are necessary, they should be made by paid experts; or if the designers make estimates, they should be verified by experts, and not by a city

engineer or by a committee of non-professional citizens. From these selected designs an architect should be chosen and a fee of five per cent be paid him in addition to anything he may have earned in competition. We will not take time and space to show the false reasoning, false economy and false estimate of the architectural profession, which is shown in every proposition of this extremely unique and wonderful list of "instructions," but will ask what will the good judgment and ability of the city engineer do the city or the cause against thirteen commissioners, even though he had an architectural as well as an engineering capability; and how can an architect afford to make the drawings asked for when the wages of the draughtsmen employed to do the tracing would amount to more than the $400 offered for the selected plan? Note the paragraph—"and that the architectural symmetry and ornamentation are in harmony with each other, then the commissioners may select two plans," etc. What does this mean? Nothing but the fact—in the plainest kind of language, too—that the commissioners who voice it have not the slightest conception of what they are talking about, and at once proves the fate of any plans that may fall into their hands for "examination."

WE are surprised to see the city of Indianapolis, above all others in the United States, engaged in such a hazardous and foolish undertaking, as they have before them today an example of what this course of procedure leads to that is unequaled. Their state house is a lesson to architects who would be competitors for such public work, and we would hold up before them the fate of that architect who, surrounded and overwhelmed by the difficulties an ignorant if not designing board of commissioners drew upon him, died before his work was half finished. There has been too much of this sort of thing in the history of public building, and until the people can be brought to see that the architecture of the country belongs to the architectural profession, and that no layman is capable of judging of architectural merit, and that it is as unbusiness-like to ask an architect's services unrecompensed as it is that of a lawyer, these mistakes will be made, these public abortions of building construction will be performed, and the loss of money and the loss of life from falling walls and ignorantly planned structures will be the daily chronicle of the public press.

IT is time that a practical and correct method for making public competition was adopted in this country. We have got to the stage where reputable architects will have nothing whatever to do with the plan now in vogue, and the result is worse than mediocrity,—public buildings that, if they do not tumble down, will be a wonder to the future age and a libel upon the present. Perhaps the best system, and one we would be glad to see adopted in the United States, is that of France, where all government, departmental and municipal buildings, both great and small, are awarded by public competition — open to all; but this great publicity is really very greatly reduced by the extreme care used in the selection of the juries who are to decide upon the merits of the drawings submitted, so that only competent men really stand a chance of success. Ordinarily the juries are composed of a few men who have a practical knowledge of the particular requirements of the building in question, to whom much is deferred relative to the convenience of the plan for the proposed building. But the greater majority of the juries are composed of a certain number of well known architects appointed by the government, department or city, and also a certain number chosen by vote by the competitors engaged. Buildings may possibly be roughly divided into three classes: 1. The smaller kinds of edifices, such as schools, small markets and ward halls. 2. Town halls, large hospitals, small theatres, etc., in fact, ordinarily large buildings. 3. Very important works, upon which almost unlimited money is to be spent, and which consequently are extremely rare. The new Opera House and the new Hôtel de Ville, at Paris, are the only recent ones of this class. Usually three or more money prizes are offered, which of course are somewhat proportional to the money to be expended; also often there are silver medals; and creditable designs not worthy of any of the above are favored with "Honorable mention." Ordinarily perspectives are not required; in fact, they are not wanted.

THE juries complain that they are catch-traps simply for the ignorant, and that they cannot judge of the real merits of a piece of architecture except in elevation. Consequently the elevations are shaded with care, and produce almost the effect of perspectives without any of the distortion. To slightly illustrate these classes, take a glance at some recent (comparatively) competitions. For the first class, or smaller buildings, there are ordinarily no preliminary competitions of sketches. Take for example that for a Mairie or ward hall, at Pantin. Copying from the published notice to architects:

> The sum to be expended, 480,000 francs; jury under the presidency of the "Maire," composed of six members named by the competitors, three members named by the prefectoral administration (*i.e.* the state), and three members by the municipal council. Four prizes — 1st, fr. 3,000; 2d, fr. 2,000, and 3d and 4th, fr. 1,000 each. If the jury decides that one of the drawings classed above shall be executed by its author, he will receive no prize but will be given charge of the work.

It will be noticed that the number of architects to be named by the competitors and the state will far outnumber the probable political wire-pullers named by the municipal council and headed by the "Maire." The jury in this class is not necessarily composed of extremely well known architects, but still they must have a certain position, otherwise they would never be elected on a jury. In the second or larger class, take for example the hospital at Roubaix:

> Sum to be expended, not including heating and ventilation, 700,000 francs. Jury to be composed of three members of the section of architecture of the Academy of Fine Arts, and two members of the administrative commission of hospitals. Prizes — 1st prize, the execution of the work, or a medal and fr. 3,000; 2d, a medal and fr. 2,000; 3d, a medal and fr. 1,000; 4th and 5th prizes, each a medal.

In this case it will be seen the jury is selected with still greater care, the professors at the finest art school in the world being the majority of the jury. In the third and last class, where enormous sums are to be spent, and where even wealthy architects could not afford to spend the large sums requisite for such thorough and searching drawings as are required, as in the case of the new Opera, where 50,000,000 francs were expended, and where almost every architect and even every architectural student wished to try his hand, for to obtain it was wealth and fame, a preliminary competition was opened, requiring really the merest sketches, and from these competitors a certain number were chosen to work up their drawings, all such receiving a certain compensation.

THE Opera plans were only decided upon at the third competition, and M. Garnier awarded the execution of the work; but in this case the jury was composed, not of well known architects or even of professors at the École des Beaux Arts, but of the very highest architectural authority in all France, and one might say the world, the members of the architectural section of the Institute of France. One of the great benefits (especially for the younger members of the profession) of the French method of competition is, that the drawings are on public exhibition, announced in the papers, both before and after the operation of the jury, so that one can from his own opinion and then afterward see how it agrees with the verdict of those known to be competent judges. At all competitions designs are submitted under some motto or device, and in case of important competition the jury sometimes hold public sittings to answer questions relative

to the proposed constructions. By this method the work of constructing public buildings always falls upon capable men, while in this country, and by our "cheap" system, never. Yet, while we have no world-renowned École des Beaux Arts to draw our juries from, we have great architects and engineers; and until these, and not the farmers, merchants and professional men of the country, of which most boards of commissioners are composed, have charge of our public construction, and not until then, shall we have buildings that will rival those of the old world in architectural grandeur.

THE proper ventilation of schoolrooms ought to become one of paramount consideration in every well regulated community. This is especially the case in all large cities, where large and costly buildings are erected to accommodate the ever-pressing demands of many thousand children, whose health and lives ought not to be placed in jeopardy by being crowded into illy ventilated rooms. Every one will admit that this question is one of deep vitality. During recent years the question has received a large degree of patient study and earnest consideration and investigation, both in Europe and in this country; but while the subject has been one of prolific discussion, both at home and abroad, among the most eminent students of hygiene, and men engaged almost exclusively in scientific pursuits, still it must be conceded that with all the progress made in architectural skill, no absolutely perfect system of ventilation has yet been discovered. At a late meeting of the Medico-Pedagogical Society held in Berlin, Dr. Toselowski gave an address on the vitiation of the air in unventilated rooms where many people, which is caused by the exhalation of carbonic acid gas from the lungs. The quantity of this gas given off by one individual amounts to about twenty litres an hour. This being the case, the air of the best arranged classrooms, where a space of four cubic meters is allowed for each student, would contain 1-200 of its volume of that gas. The fact is, however, that first-class rooms seldom contain over two cubic meters of space for each scholar, which readily explains why the air of those rooms, which is also contaminated with other human exhalations besides carbonic acid, seem disagreeable to persons entering from the outer air. The Doctor, in view of these considerations, thinks that the following rule ought to be adopted and enforced, viz: "Every classroom shall be provided with an apparatus for ventilation, and all the scholars shall leave it for a few minutes at the close of every hour." We are satisfied that such a rule could never be made to answer satisfactorily in the public schools of this city.

IT may be mentioned that such noted experts as Dr. Frederick Falk, and Prof. Develle, of Paris, have recommended German earthenware stoves for heating schoolrooms, because scientific experiments have revealed many objections to the use of heating by hot air. Experiment showed that sixty litres of hot air taken from the pipes by means of an aspirator and drawn through potash bulbs containing absolute alcohol, colored the latter yellowish-brown, and numerous dark flakes were seen floating in it. After filtering and evaporating, an extract was obtained which was insoluble in water, was of a brownish color, had an intensely harsh taste, and possessed a burnt, tarry odor. The dark-colored flakes proved to be soot. According to Tissandier, there are eighteen milligrammes of air-dust in one cubic meter of air, and twenty-five to thirty per cent of this dust consists of organic matter. The experiment just described confirms the view that the organic part of the dust of the air is wholly or partly decomposed in the highly heated iron pipes into tarry products. This decomposition goes on below a red heat (at 400 degrees centigrade), and Prof. Tuchschmid has shown that at the same degree of heat the iron of the pipes is permeable to carbonic oxide and carbonic acid gas, which may therefore be carried into the schoolroom with the air. Besides the impurities thus introduced into the rooms, the injurious effects upon the organs of respiration of dry, hot air itself is now well known, though the better class of radiators, both direct and indirect, obviate this to a proper degree. Dr. Toselowski proceeds to explain in fuller detail the absolute necessity of ventilation, but the subject is too large to permit of a more lengthy notice. It is known that atmospheric air contains about four parts in 10,000 of carbonic acid gas as a normal constituent, and if this quantity is taken as a measure of the purity of air, the latter, according to Peltenkoffer, ought to contain more than seven parts in 10,000, if the increase in carbonic acid is due to that given off in the breath, and the proportion should never be allowed to exceed one part in 1,000. Taking this as the extreme limit, it is reached in an hour's time, even when the schoolroom so arranged as to allow five meters space for each child (which is rarely the case), and is ventilated at the rate of thirty-five cubic meters of air an hour for each child.

THE people of St. Paul are to be congratulated upon the prospect of getting a new court-house. The present structure, built in territorial times was at the start an illy-conceived and poorly-constructed affair, but it has had its purpose and served its time, and something far better and on a grander scale is now imperatively demanded by a city which is now putting on, supporting with becoming dignity, metropolitan airs. A writer in the St. Paul *Pioneer-Press*, in view of the fact that the court-house commission has held a meeting and taken preliminary steps toward procuring plans for the new building, very pertinently remarks:

"As this building is one which more than anything else will give permanent character to the city of St. Paul for generations to come, and will, or should be, an ornament and a monument to the city such as the people will always take pride in, it becomes the duty of the citizens and their privilege to see that the work is done in the most satisfactory manner, and after the wisest plan that can be found. Our court-house commission should consider most carefully all sides of the question, get all the information possible about other buildings of this sort, find the reasons for their success or failure, and profit by them; being most cautious in everything and doing nothing too hastily. * * * In the first place, a sufficient sum of money should be placed at their disposal, if it has not already been done, to allow the board to take into their number some expert in such matters, whose advice would be of value, or that they should send a committee from their number to inspect the principal court-houses and works of this character in larger cities, and so be able to proceed with knowledge, and to take advantage of the experience of other commissioners, avoiding their mistakes. * * * The question of obtaining plans for the building will probably be a most difficult matter, and should be done with much deliberation and caution. Our mistakes in St. Paul in this respect have already been too numerous, and should not be repeated. Experiences in such matters would dictate that the methods found to work best in older communities are the best to be followed in this case; that only the best architectural talent should be employed, and the men of such talent can only be obtained by approaching them in certain recognized and natural ways."

These suggestions are practical, and ought to afford food for thought to the commission. The city of St. Paul should have a court-house building which will in every way reflect honor upon the city and fully meet all its wants for many years to come. The men who are to secure such a structure ought to be earnest and thoroughly practical men, inasmuch as they are to determine what kind of a building the new court-house is to be, and they must take into consideration what the future wants of the city will require. They cannot afford to make any mistakes in its construction, and to avoid these they must see for themselves what has been done elsewhere, and employ architects who are well known and of established skill and ability. The architectural blunders which caused the fall of the south wing of the new capitol at Madison, Wis., must be borne in mind, so that there may be no need in the future of an expert inquiry into the cause of a similar disaster at St. Paul. To employ only the best architectural talent, and to have the work done in a thorough and masterly manner, is clearly the duty of the commission, and St. Paul has a large number of capable architects any one of which would, without doubt, give these gentlemen points upon professional usage and charge nothing for the information.

THE Chicago Manual Training School gives promise of great usefulness in the future. At the examination held January 3, thirty-eight applicants were admitted. The next examination will be held February 1, at 9 A.M., at the school building, corner Michigan avenue and Twelfth street. The school will be opened Monday, February 4. It is gratifying to know that this enterprise is meeting with the success its character deserves. Believing that the present system of education does not afford their youths over twelve years of age the benefit that mechanical training schools would produce, the Mechanics' Exchange of St. Louis has petitioned the board of public schools to take into consideration the feasibility of establishing manual training schools in that city upon the most practical and useful basis. The good already done in St. Louis by her training school, and the popularity of such institutions among her leading citizens, is illustrated by the will of the late Ralph Sellew, who, from an estate of probably less than $150,000, bequeaths $40,000 for the use and benefit of the Manual Training School connected with the university. There is no worthier object, and as the cities of the United States contain many such broad-gauge, public-spirited men, the success of such schools is assured. The Washington University, in championing training schools in St. Louis, is doing a great work, and certainly merits such recognition, though the training school in this city is formed, and is the one likely to be considered as a model.

THE building outlook for the ensuing year is fully as good as that presented at the opening of 1883, and architects are confident that the record will be a large and satisfactory one. The boards at all the offices are well filled with projected work of both a public and private character. A vast amount of work is carried over to be completed this year, and several very large and costly public edifices will be fully completed and occupied before the summer is ended. Plans are under way for hundreds of blocks and residences, some of which will be models of architectural skill, and, barring any trouble among the bricklayers, the fall months will find these all complete. The large number of flats built during the past few years seem to have pretty much filled a want, and there will be less of this kind of building done this year than last. Many cottages and fine brick residences will be commenced and pushed forward rapidly as soon as the weather will permit. Altogether the prospects are exceedingly flattering, as the tendency of capitalists is to place money into realty and building, the money market being exceedingly low and the state of trade pointing to this class of investment as the most lucrative, or at any event the most secure.

THE organization of The Chicago Real Estate and Renting Agents' Association, formed for the mutual protection and the advancement of the interests of both the agents and their clients, is undoubtedly a move in the right direction. That it is destined to meet with the active support of the profession in general may be inferred from a glance at the list of membership, which includes some of the oldest and most prominent real-estate men of Chicago, and this, too, while the organization may be said to be still in its infancy. The real-estate fraternity of Chicago is composed of men of great energy, hard workers well calculated to succeed in what they undertake, and in seeking to raise their profession to a higher plane they have set before themselves a task worthy of their efforts. The association was formed in 1883, and its first annual banquet, held at the Palmer House on the 15th inst., was largely attended, and the enthusiasm which prevailed was a happy omen on the occasion of launching the society on the second year of its existence.

Review of Chicago Building for 1883.

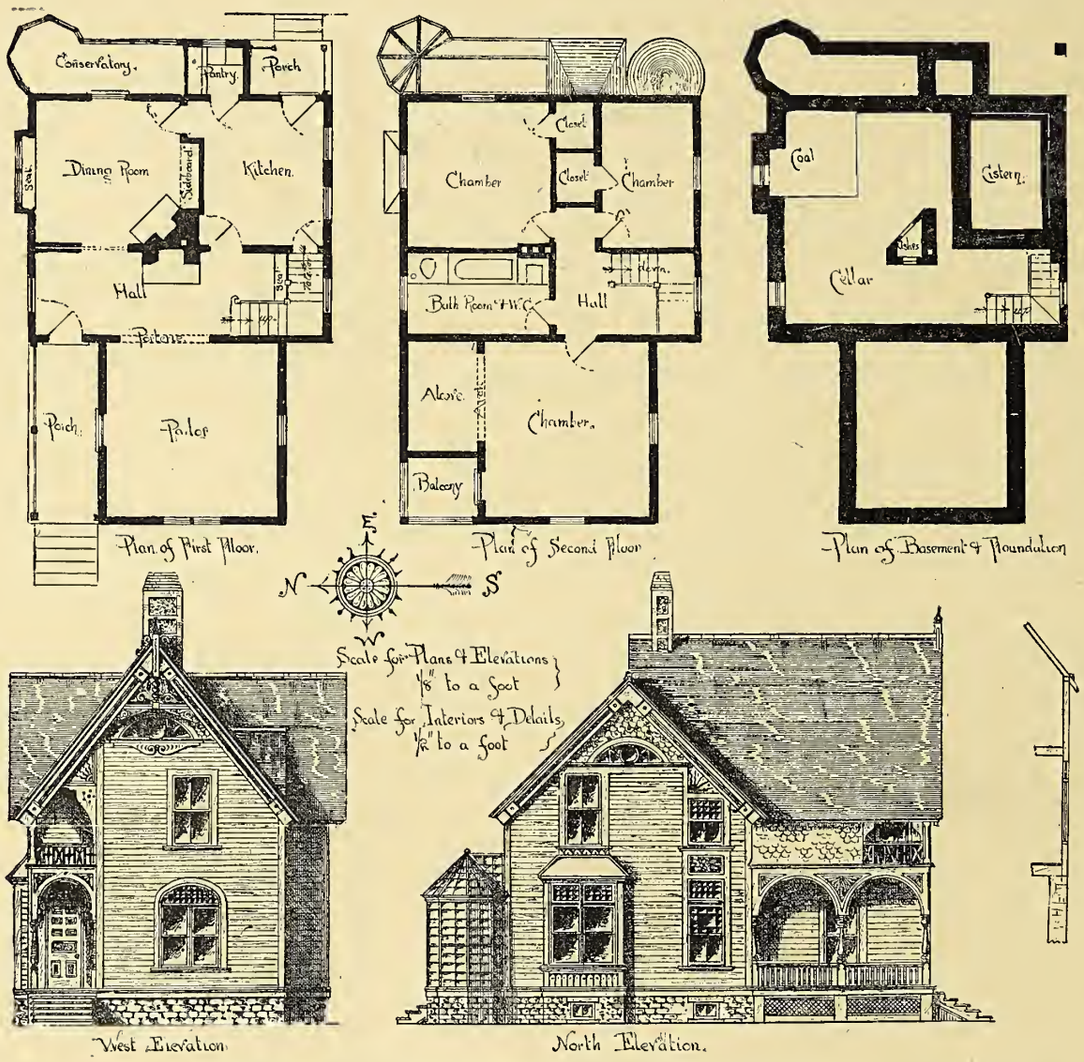
RETROSPECTIVE of the building progress of Chicago during the year 1883, the fact is no less portentous than gratifying that no other city in the country, New York alone excepted, has made a more brilliant record in this respect. The statistics furnished by the city building department show that during the year the total number of permits granted were 3,204, and authorized the erection of 4,086 buildings, with frontages amounting in the aggregate to 85,588 feet, and at a cost of $22,160,610, exclusive of sheds. If we include the county hospital and city hall, $475,000, and sheds, $160,000, a total is reached of $22,795,610. The measure of progress has been the largest in the West division, the frontage there constructed reaching 48,629 feet, at a total cost of $9,592,540, as against 19,986 feet in the South division, costing $7,326,610, and in the North division, 17,273 feet, at a cost of $5,241,460, making the total as given in the above former figures. It is noticeable that the past year has marked the commencement of more large structures than any year since the year immediately following the great fire, and even this has been abridged by the protracted and foolish strike of the bricklayers during the spring months, which suspended for an "indefinite period" the erection of several costly structures, both for public and private use, and for which plans had been fully prepared, and which, had the work on them gone forward, would have increased the above estimates nearly $2,000,000. The almost total suspension of building operations during the spring months was indeed a serious drawback to capitalists, and affected, almost disastrously, many other branches of business, especially such as are closely allied to building operations; but the strike once terminated, the buildings immediately put under construction were sufficiently numerous to keep the vast army of workmen busy during the summer and fall months, work being suspended only by the severity of the weather, which set in in the latter part of December. No other city in this country, with the one noted exception, presents a larger outlay of capital in the line of building enterprise, which establishes beyond question the strong faith and assurance moneyed men feel in the future of this wonderful city. It is to be noted, in this connection, that by far the larger number of these structures in each division of the city were private dwellings; and the fact is also to be recognized that the buildings created are of a better and more substantial class than those erected in former years, the material entering into their construction comprising, to a large extent, pressed brick, which has been used largely in the construction of outer walls, especially fronts, giving them an appearance of tasteful as well as substantial elegance. A number of the larger and more costly edifices in course of construction for corporate and public uses, and into the construction of which only the costliest material enters, have attained such progress that midsummer of the present year will witness their completion, while others still more stately and of still more enduring contexture will be finished in the fall. Chicago has not yet reached that point in her history when the supply of her dwelling-houses is in excess of the demand. In times of more than ordinary depression an exacting economy may compel the retirement of many families to less pretentious quarters than they would otherwise occupy, but in comparison with other cities the signs "To Rent" are far less frequent here than elsewhere.

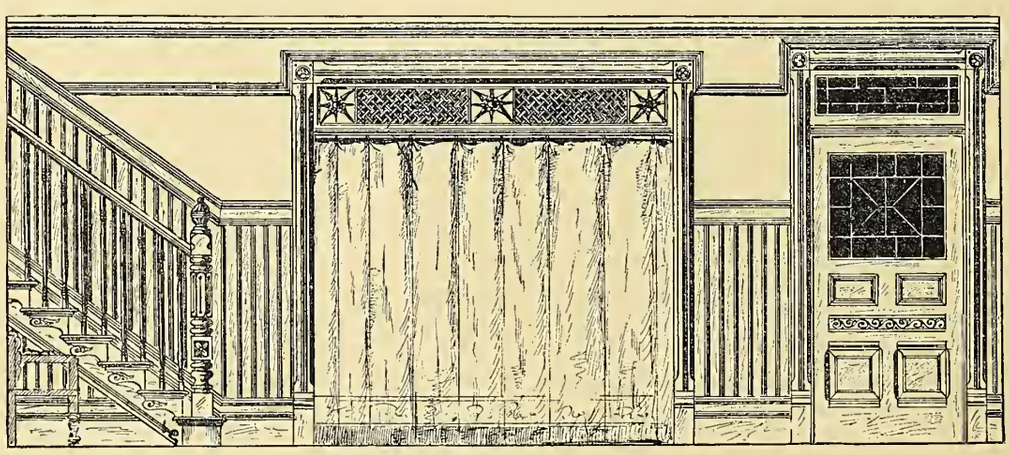
Situated as Chicago is, on a broad expanse of prairie, there is hardly a limit to her future potentiality. The almost miraculous achievements of the past afford to those who are living today a possible conception of her future greatness and renown. It is well, therefore, that those who

are the active builders of Chicago — the capitalists of the city — through our expert architects, should strive to do whatsoever their hands find to do with all the power at their command, and in the construction of both private and public edifices have a regard to their permanency, no less than to the substantial beauty of their design and finish. No other city is more favorably situated, nor has at its convenience and command all the prime essentials for making its monuments, of whatever nature, enduring. With timber and iron, granite and stone, in quantities without limit lying almost at her very doors, there is no reason why these materials should not enter more largely each year into the construction of all her large edifices. The buildings constructed during the past year — at least many of those which are of a public character — it is pleasant to chronicle, have partaken more largely of a fire-proof nature in their construction than any buildings previously erected in the entire history of the city. Perhaps an ordinance requiring that all public buildings — or, for that matter, private buildings — which exceed a certain cost should be made as near fire-proof as possible, would not be found without great practical benefit, if its provisions could be enforced. Every building erected in a city like Chicago, costing say $50,000 and upward, ought to be practically a fire-proof structure. The time has come when building material of nearly every description can be supplied in this city at a moderate expense. Brick, which now enters so largely into the construction of buildings, is one of the great industries of this city, and the improvements in its manufacture of late years have been very marked. The local yards turned out during the year 1883 about 320,000,000, leaving at the close of the year less than 50,000,000 on hand. The average price of brick during the year was about $7 per thousand, the prices averaging about $1 to $2 per thousand less than during the preceding year. The competition existing among manufacturers is likely to keep the prices at a reasonable figure for some years to come. It is quite probable that the art of brickmaking has, after so long a lapse of time, at last reached as near to perfection as it is possible to attain. Aside from the enormous quantity of common brick used, it is estimated that some 25,000,000 pressed brick was consumed, those from outside points being from St. Louis, Indiana, Philadelphia, Trenton, Baltimore, Zanesville, and one or two other points. Lime, which must be associated with brick, has averaged during the year about eighty cents per barrel, and upward of 700,000 barrels were sold during the year. The quantity of firebrick used during the year shows an increase of about ten per cent over the previous year, involving an outlay of about $325,000. We have in Chicago, in all, about sixty-five brick-yards, twenty-one cut-stone cutters, twenty marble-workers, fourteen gravel-roofers, four lime-kilns of large capacity, and two terra-cotta works. The combined capital of these industries amounts to $2,481,000, giving employment to about 5,000 workers, and yielding a product of $6,600,000. It will readily be seen from the foregoing exhibit, that as far as the articles which enter so largely into the construction of our buildings are concerned, we find them in unlimited quantities at our very doors, and they are placed at the command of the capitalists at a comparatively low cost, certainly on terms equally as low as they can be furnished elsewhere.

It is somewhat an anomaly in the history of the lumber trade of Chicago that the receipts for 1883 show a decrease from those of the year previous, amounting to some 225,000,000 feet. But the year 1882 was an uncommon one in the history of the trade, and it is quite unlikely that so large returns will be made again for some time to come. The stock on hand at this writing is not far from 583,000,000 feet, comprising all varieties, and builders during the past year have had the advantage of an exceptionally unsettled and cheap market. As a matter of fact, the average cost to put 1,000 feet of lumber on this market has been about $12.50, and it has been sold at an average of $9.50 to $10.50. The year has been one of great stress among the Michigan lumbermen. Dealers here have purchased at low prices, but they have also been obliged to sell at low figures, which have favored the builder. The local demand for consumption has taken about 500,000,000 feet, but this has been sold at a fair profit. The planing-mills, sash, doors, mouldings, etc., manufacturers of Chicago represent a combined capital of $4,175,000, give employment to upward of 5,500 workmen, and turn out an annual product of about $12,500,000. While Chicago receives the great bulk of her lumber from Michigan and Wisconsin, the finer and more durable descriptions of lumber for costly house-finishing have come to us from the vast forests of yellow pine in the South, notably from Georgia, and not an inconsiderable amount from Alabama and Florida. The yellow pine which comes to us from those states has been growing in constant favor with builders, and in many of the finest edifices in Chicago this wood is used. During the year, also, not an unimportant amount of fine woods have been received and used from California, among which the celebrated redwood from that state has found a prominent place. Hard woods of almost every kind and description, from the most costly to the cheapest, are to be had here, and at prices which will compare favorably with those ruling at any other inland point in the country.

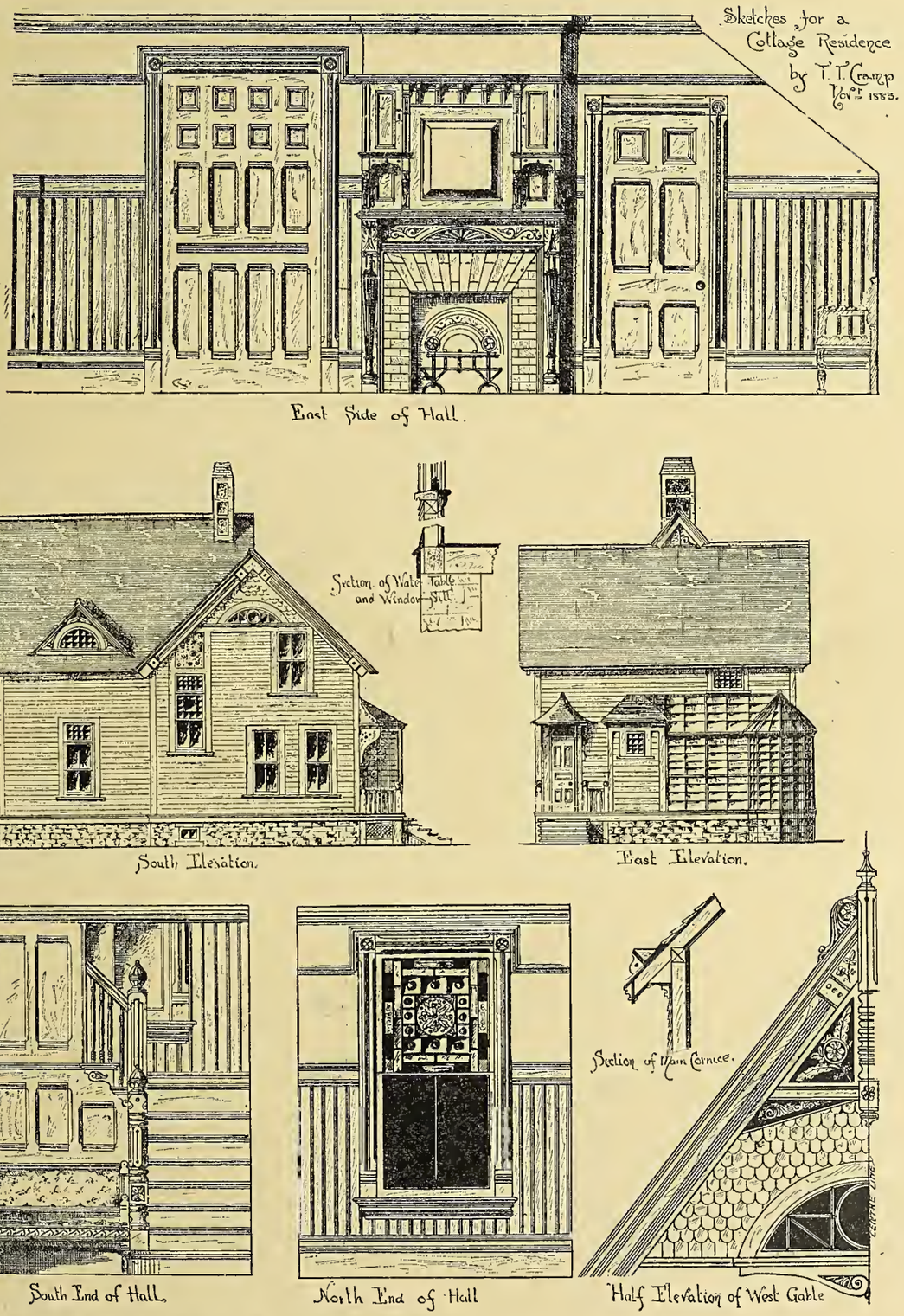
Decoration and the adornment of private houses and public buildings in Chicago is a matter which, in late years, has received very marked attention. The marble-workers bear testimony that in this line business has been remarkably good during the year, and considerably in advance of the year preceding. Large quantities of marble are received here in the rough from the celebrated quarries of Vermont and also from the Southwest, and here adapted to any desired want. The painters have also had a comparatively prosperous year, inasmuch as they have been able to purchase their supplies at reduced figures. Fresco-painting has increased in popularity and extent, and Chicago can boast that some of the work done in this line by her own artists is not surpassed anywhere in this country. The time has gone by when Chicago finds it necessary to send to New York to secure work of this kind. Our decorative artists are equal to any emergency, and where an artist is required from New York it has been found that those who come here have performed their work in an inferior manner. House decorating has become indeed one of the fine arts, and our city is now so thoroughly cosmopolitan, and its building and architectural growth so rapid, that several large houses are amply and handsomely sustained which devote their entire time and attention to this one branch of business alone. Architecturally speaking, Chicago has grown great and grand by reason of the skill and ability of her architects, acquired through long years of close and faithful application to one of the severest of studies — a study which carries with it at all times a peremptory strain, oftentimes taxing both body and mind to the utmost tension. They have erected here on all sides more enduring monuments to their genius and skill than either marble tablet or granite shaft can reveal, and which will imperishably link their names with all that is really grand and noble in the architectural and historical annals of the city. Owing mainly to the strike among the glass-blowers the past season, plate-glass advanced forty per cent, and factories of the country have been severely taxed to fill the demand made by the extraordinary amount of building done.





West Side of Hall.

ELEVATIONS, PLANS, AND DETAILS OF A CHEAP



COTTAGE RESIDENCE.—By T. T. Cramp, Architect.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

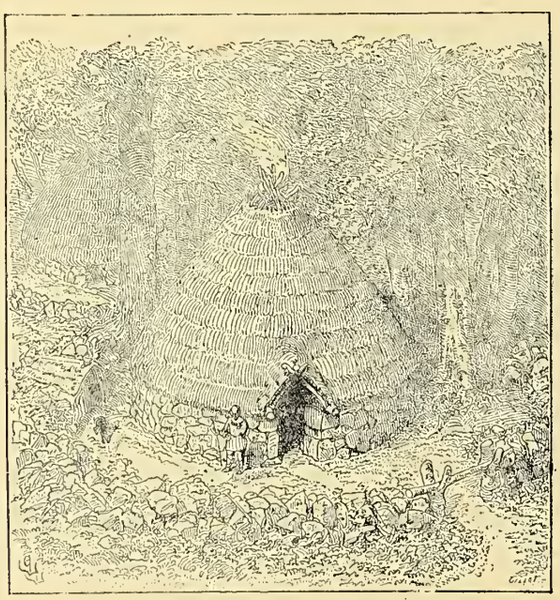
PART X.—THE CLASSIC PERIOD.

NOT long ago, not only the history of architecture, but the history of civilization, commenced in Greece, in the eighth century before our era. But now, by the study of the monuments and the reading of the hieroglyphics in Egypt, and the excavations and the deciphering of the cuneiform characters in Assyria, we have found two civilizations much older than anything in Greece, enlightening us as to the origin of the arts, sciences and religion of the classic period.

Architecture is not a special creation, nor was it discovered in a night, like the last comet; nor has any style been the invention of any one man nor even of one generation, but each style has been evolved from what has gone before, under the influence of race traditions, the religion, the available building materials, and the requirements of the civilization; in short, what the zoologists call "the environment." Grecian architecture did not commence with such works as the Parthenon and the Erechtheum. Let us try to trace its origin.

First, who were the Greeks? Their language was Aryan, with but very slight admixture from other sources but their arts, their religion, and frequently their institutions, have a very different origin. This is one of those marked cases where archæology is of great assistance to the ethnologist (*Fergusson*). The ruins at Mycenæ help to solve the mystery. From them we learn that at the time of the Trojan war a people were supreme in Greece who were not Hellenes, but were closely allied to the Etruscans, and other tomb-building or art-loving races. They were known to the ancients as Pelasgi. They were Turanians, possibly mixed with the Celt; they became more or less mixed with the Dorian, that is Aryan, races. This mingling of the races was not homogeneous throughout Greece. Sparta was pure Dorian or Aryan, and cared little for the arts, while in Athens the Pelasgi and the Dorians were so happily mingled as to produce the most artistic city the world has ever seen.

The religion of the Greeks was certainly not Aryan. The manlike character of their numerous gods, their belief in oracles, their worship of trees, etc., were Turanian (*Fergusson*). The most salient features of the architecture of a country are the temples and the palaces, but the hut and the dwelling existed before the palace and the temple, and often are of assistance in tracing the style, even when we work backward and deduce the hut and dwelling from the more important constructions. Viollet-Leduc concluded that the house of a Pelasgian peasant was like this:



House of Pelasgian Peasant. (Viollet-Leduc.)

The deeply indented coast and the numerous islands of the Mediterranean were very favorable to piracy, which we know to have been very common in early historical times, and doubtless dated from times very remote. This necessitated that dwellings and villages near the coast should be protected by some defensive works. A Pelasgian noble or chief would select a naturally strong position for his house, and would build the entire structure of stone, which was very abundant.

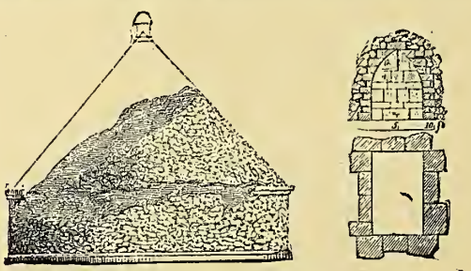
Tombs like these in construction exist at Mycenæ. We know that Darius copied his palace for his tomb, and Viollet-Leduc has all the probabilities in his favor in this reproduction of a Pelasgian dwelling. There are the remains of many ancient walls in Greece constructed in a very rude manner, called Cyclopian, supposed to have been built by the Cyclops, those gigantic sons of Neptune with one eye. These walls were evidently Pelasgian; moreover, Vitruvius describes this circular hut as the primitive habitation of this region.

These habitations are a long way off from the Parthenium.

Let us pass to Asia Minor, a country situated in the very center of the old world, with large water frontage, possessed of many excellent harbors, opening all the world to her commerce, and, we may say, to her piracy. The country was rich and flourishing at a very early period. We know, from the monuments in Egypt, what beautiful vases of gold and other rich tributes the inhabitants of Asia Minor brought and laid at the feet of Thothmes, and other early kings of the eighteenth Dynasty in Egypt, at least eighteen centuries before the Christian era.

Tombs and tumuli are scattered over the country.

Here we see the early hut erected in stone for a tomb.



Elevation and Plan of Tumulus of Tantalais. (Fergusson.)

Among others, on the plains of Troy, is the tomb of Achilles, with a chamber under which was discovered a small statue of Minerva seated in a chariot with four horses and a metal urn filled with ashes, charcoal and burnt bones. The urn now in possession of the Count de Choiseul is ornamented with a vine and grapes, done with exquisite art.

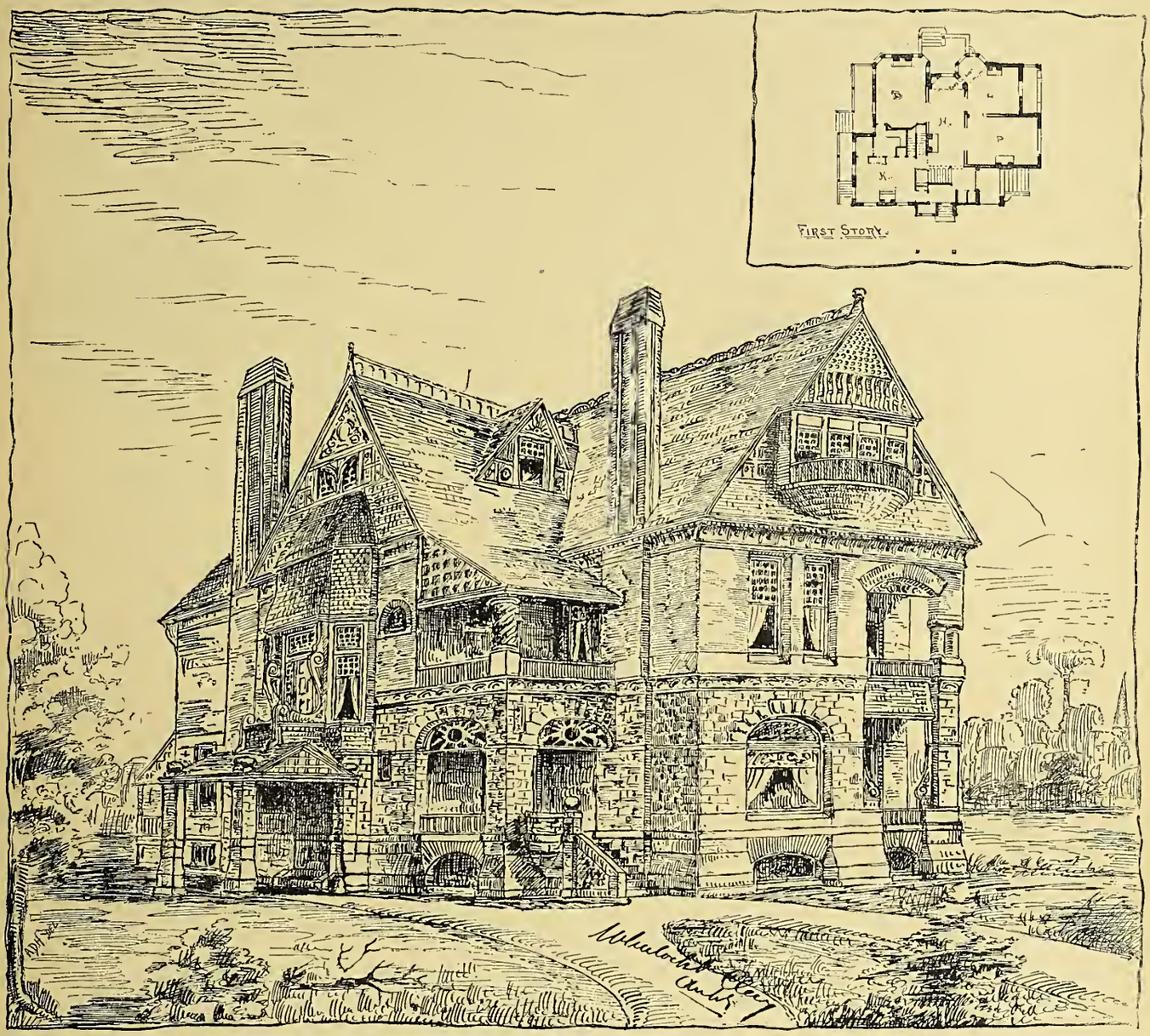
You are all familiar with the recent discoveries of Dr. Schliemann in this region, where were enacted those stirring scenes you find so grandly described in the Iliad.

One of the most interesting facts brought to light by De Schliemann is that between the Ilium of Homer, rich in metals and the arts, and Ilium Novum. There were two cities on the mound of Hissarlior, one passing into ruins and covered with débris, on the top of which was built the second. These two cities were inhabited by a race ignorant of the use of metals, using only bone and stone implements. This alone is sufficient to upset the once fashionable Danish theory of the three ages—the stone, bronze and iron,—except in a very general sense, exposed to marked exceptions. In fact, men of the stone age exist today in isolated savage countries.

As Others See Us.

THE Dubuque *Herald* says: As the name indicates, the INLAND ARCHITECT AND BUILDER is devoted to the study of architecture, construction and decoration. The first number was issued last February, and it has in the short space of ten months grown into favor among those interested in this important industry and has attained a large circulation. Those interested, professionally or otherwise, in the planning, building or decorating of homes or commercial or public structures, will find this journal a help to them as well as entertaining. The best architects and builders in the West are contributors with pen and pencil. It is highly instructive in theory, practice and illustration. We notice that Mr. Hyde, of this city, is a frequent contributor, and in the October number is shown a fine perspective of the residence of J. H. Campbell, of Independence, planned by him, costing $18,000.

THE new home for old ladies at Detroit, Mich., will be ready for occupancy about June 1. The building will be heated by steam and contain in all forty bedrooms. The dimensions are about ninety feet in length, fifty-six in width, and eighty-eight feet in height to the top of the tower. The entire cost will be about $30,000, entirely defrayed by Mrs. Thompson, who also gave, when the home was first started some seven years ago, $10,000, besides annual donations since.



A PROPOSED CITY RESIDENCE.—Wheelock & Clay, Architects.

A Criticism.

ARMISTON, Ala., December 20, 1883.

To the Editor of the Inland Architect and Builder:

In your issue for December, page 144, illustrating a lecture of Prof. W. L. B. Jenney — No. 3, "Entrance to Assyrian Palace," I see a *round arch* with a very modern looking, evidently colored border, springing from the heads of the "Winged Bulls." I am aware that examples of the arch are known of anterior to Roman or Etrurian times, but in connection with Assyrian architecture, the arch is *new* to me, as it probably is to many of your readers who are not so conversant with archæology as Prof. Jenney. Will you therefore be kind enough to publish in your next issue the authorities for the use of the arch as given in the illustration referred to in connection with the winged bulls of Assyrian history?

Very respectfully,

JOHN MOSER, Archt.

N.B.—Please give the place where this combination exists or existed.

Below the engraving, "Entrance to Assyrian Palace," "From Viollet-Leduc" was written in Mr. Jenney's notes, and was accidentally omitted by the printer. It is to be found in "Habitations of Man," page 149. The original is a city gateway at Khorsabad, discovered by M. Place. A semi-circular arch of eighteen feet span, supported by human-headed bulls, is adorned, on its face, with an archivolt of great beauty, formed of blue enameled bricks, with patterns of figures and stars of a warm yellow color relieved upon it. (*See Fergusson, History of Architecture, second edition, page 175, for illustration and description.*)

In same work, page 205, we find: "In his researches at Nimroud Leyard discovered vaulted drains and chambers below the northwest and southeast edifices, which were consequently as old as the eighth or ninth century before our era. They were both circular and pointed forms, and built apparently with great care and attention to the principals of the arch."

The semicircular arches which spanned the city gates of Khorsabad were "so perfect, both in construction and in the mode in which they were ornamented, as to prove that in the time of Sargon the arch was a well understood and usual building expedient, and one, consequently, which we may fairly assume to have been long in use."

It is remarkable that the announcement of these discoveries should have escaped the attention of our correspondent, whom we know as an enthusiast in architecture, a member of the institute, and one of the hardest workers in the profession. His familiarity with the Assyrian decorations that he terms "modern looking and evidently colored," recalls the criticism of Hamlet by a young student on seeing it for the first time, "Made up largely of familiar quotations."—[EDITOR INLAND ARCHITECT AND BUILDER.

Our Illustrations.

Pages 156 and 157. Elevations, plans and details of a cheap cottage residence. By Architect T. T. Cramp, St. Paul.

Page 159, Dwelling by Architects Wheelock & Clay, for a prominent merchant of Chicago, to be erected the coming spring on Hyde Park avenue. The building will be constructed of Pennsylvania Serpentine stone to the top of second-story window sills, with fine pressed brick above, and red slate roof. As the interior finish has not been decided upon, the cost cannot be estimated.

The Art Guild Reception.

PAINTERS' NIGHT.

BY earnest work and judicious management the Art Guild has become the center of the arts in Chicago. This society, which has for its object the drawing together of kindred minds in informal association, tending toward the elevation of art, and a more intimate acquaintance among the artists on the one hand, and a wider influence and knowledge of the public taste on the other, have begun the present season by giving to the representatives of each profession an evening upon which to spread before their associates and the public examples of their work tending toward its better appreciation and advancement. In accordance with this new and better plan, the first evening of the season was given to the painters, whose unique invitation, designed by Mr. E. L. Field, from a scene painted in Normandy the past summer, notified the members of the Guild and their friends that the painters would hold their reception at the rooms of the Guild, in the Weber Music Hall, on the evening of December 21. The walls of the rooms were artistically hung with contributions from many prominent artists. Those of E. L. Field, Julius Rosenburg, John R. Kee, Frank C. Bromley, and L. C. Earle, being specially noticeable. There were no great paintings, bringing any one of the artists represented into prominence, but the sketches, by their variety of subjects illustrated the versatility of many of the artists, notably those of Mr. Earle, showing examples of animal, flower and landscape painting. Mr. Rosenburg has a distinctive style which runs through all his sketches, but he is always artistic, always harmonious, and chooses his subjects from among every-day incidents and scenes. Mr. E. L. Field's most noticeable painting represented a Norman peasant-girl seated under a tree among flowers and butterflies, pulling the petals of the blossoms — evidently some sweet Marguerette playing "He loves me, he loves me not." The attendance was all that could be desired. Among the guests were a number of prominent architects, and a large proportion of ladies who were the critics of the evening, showing not only an appreciation for, but a technical knowledge of the several merits of the contributions. The two most notable evenings of the season will be those of the architects and the decorators. A feature of the former will be an illustration in detail of the construction of a house from its conception to its completion.

An Art Exhibit.

The Chicago Art Institute gave its second annual exhibition on Saturday evening, the 12th inst., which was attended by over 1,000 persons, representing the wealth and refinement of the city. The collection of pictures was really superb, many of which are masterpieces and costly. The large majority of these are ordered in this city, and adorn the walls of many elegant homes. Where so much is exhibited that commands attention and admiration, it would seem invidious to particularize, and therefore details are omitted. The collection shows that American artists are well to the front, and the excellent showing by Chicago artists proves the Art Institute to be a grand success.

A Builders and Traders' Exchange.

THERE is certainly power and strength in concentration, and in this busy age there is unquestionably very much to be gained by bringing varied and extensive business interests toward a central point. When we reflect over it, it seems a little strange that up to the present time no effort has ever before been made to organize a Builders and Traders' Exchange in this city. Boston, Philadelphia, New York, Cincinnati and St. Louis, each have large and efficient organizations of this kind — organizations, too, which have risen rapidly to the first rank among the business institutions of the country, and which already exert a healthy influence on the trades they represent, and in every way possible promote their best interests. It was, therefore, a timely meeting called in the large hall on the second floor at the northeast corner of Washington street and Wabash avenue on the 9th inst. to consider the project and devise ways to form such an organization. Over one hundred builders, contractors and tradesmen assembled there at 2 o'clock P.M. Mr. George C. Prussing rapped the meeting to order, and said that the proposed exchange was a necessity to Chicago; the master masons had recognized this fact years ago, and opened their doors for the exhibit of masons' materials.

Mr. Marshall W. Carter was then chosen to preside over the deliberations, with Mr. Calloway for secretary. The chairman said: "Gentlemen, you should either drop this project today and never think of it again, or take hold of it in earnest and make it a success. Builders, furnishers, architects and property-owners all need it."

Some discussion followed, in which Mr. Prussing expressed his belief that 3,000 members would be a low estimate for such an institution in Chicago. Mr. Henry L. Gay said the rent of the hall would be $6,000 a year, and the needful improvements would cost $5,000, making a total of $11,000 outlay the first year if they should choose so large a room. Senator George E. White suggested that they should temporarily become subscribers to the exchange, with the understanding that the membership fee for each firm shall not exceed $25 a year. This suggestion was adopted, and embodied in the following resolution offered by Mr. Prussing:

WHEREAS, We recognize the importance of a Builders and Traders' Exchange to accommodate all persons engaged in the various building trades, and dealers in and manufacturers of building material, for the transaction of business with one another and with the architects of this city; and

WHEREAS, We believe in the establishment of such exchange under the same roof with the permanent exhibit of building appliances: therefore, be it

Resolved, That we, the undersigned, do hereby subscribe our firm names as members of the Builders and Traders' Exchange of Chicago, to be governed by such rules and by-laws as may be adopted at a subsequent meeting of the subscribers.

Upward of eighty members were secured, and the following gentlemen, representing various interests, were named as a committee to draft by-laws and report at the next meeting: H. C. Hoyt, George Tapper, J. P. Ketcham, George E. White, Jonathan Clark, John Tomlinson, William Chenowith, William Wilson, James Johns, George C. Prussing and Architect W. L. B. Jenney. The above committee held a meeting on the 11th inst. at No. 10 Arcade Court, and arranged to carry out fully the instructions of the original meeting, meeting again on the 16th inst., to hear the report of the sub-committee, when a permanent organization was the result, and the Builders and Traders' Exchange, with a large and influential following, has become one of the really beneficial and permanent organizations of the city. This, to Chicago, gives what has so long been needed, a building headquarters, comprising all the different lines of building trades, a meeting-place for those interested in building, and which, connected as it is with the permanent exhibit of building materials, which has, through the efforts of its projector, Architect Henry Lord Gay, aided by the active coöperation of the building material men of all classes, become an assured success, is destined to grow and become a lasting good to the building interests of the entire West.

Architectural and Building Notes.

THE amount expended in building improvements at Northfield, Minn., in 1883, was $70,000.

THE fine opera house block at Meadville, Penn., costing half a million dollars, was totally destroyed by fire on the 8th inst.

ARCHITECT S. S. BEMAN has taken permanent quarters at the Pullman Palace Car Co's office in this city.

A SCAFFOLDING on the third story of Conro's block, Milwaukee, fell January 8. John Dunn, contractor, was killed. Henry Hove and Cazemer Kloptock, masons, were fatally injured.

THE plan for a new court-house at Greenville, Ill., was selected on the 7th inst. by the county board, out of twelve plans in competition. W. R. Parsons, a Quincy architect, was successful.

ARCHITECT J. J. EGAN is making contract for Ryan's Hotel, to be erected in St. Paul, Minn., as soon as the weather will permit, to cost in the neighborhood of $1,000,000.

MESSRS. HEALY & MILLET, the stained glass artists, have recently contracted for the stained glass and pillar decorations for the Church of the Nativity, of Chicago. The decorations will cost $2,000.

THE American Stone Manufacturing Company is a company recently organized for the production of artificial marble and granite. They display at their office some excellent samples of imitation stones and marbles.

THE Cincinnati bricklayers have made arrangements for the season with the master masons in advance of the National Bricklayers' Convention, having agreed to a schedule of $4.50 a day for ten hours a day, except Saturday, which will be one hour less.

SENATOR HILL has introduced a bill to require that a government building be constructed in every city and town of the Union in which the postmaster draws a salary of one thousand dollars and over. Hill says that this policy would save the government one million dollars per year rent.

THE INLAND ARCHITECT AND BUILDER is a magnificent specimen of typographical skill and editorial ability. It is a monthly journal devoted to the Western interests of architecture, building and decoration, and is a credit to the profession, as well as to journalism, and its publishers the Inland Publishing Company.—*Joliet Daily Press.*

THE Durham House Drainage Co. have donated the skilled labor required in placing the plumbing and gas-fitting in the new Manual Training School. This company, whose system of house drainage is becoming very popular, are placing their iron drainage in the Board of Trade, the Western Indiana railway depot in Chicago, and the West Hotel under construction in Minneapolis.

THE Kewanee Firemen will give their tenth annual reception in Library hall of that city on the evening of the 25th inst. It is understood that this company, who are said to be one of the finest in the state, are making considerable preparation for this event, and it displays a commendable spirit of enterprise in the business men of Kewanee in thus supporting a first-class fire company for the protection of their manufacturing and private interests.

ARCHITECT J. H. HUBER has made plans and is now superintending the construction of a flat-building on Park avenue, west of Robey, for Mr. John W. Ela, the attorney. The building will be 40 by 70 feet, three stories and basement high, and will have an Anderson pressed-brick front trimmed with terra-cotta. The halls will be lighted by windows with cathedral glass, and there will be transoms of the same material over the front windows. The outside stairways will lead to Eastlake porches, and the halls will have floors of tile. Complete, the building will cost $16,000.

THE annual meeting of the Architectural Association of Minnesota, was held in St. Paul on the 8th inst. The election of officers for the ensuing year resulted: President, Isaac Hodgson; vice-president, D. W. Millard; secretary, H. S. Treherne; treasurer, G. W. Stevens. All are

residents of St. Paul excepting Mr. Hodgson, who lives in Minneapolis. After the election, E. P. Bassford, the retiring president, read his annual address. The next meeting of the association will be held in Minneapolis on the first Tuesday in February.

JEAN BAPTISTE CICERON LE SUEUR is dead in Paris. This celebrated French architect was born near Rambouillet, October 5, 1794. He won the Roman prize at the school of fine arts in 1819, and spent several years in Italy. Returning to Paris, he designed the parish church of Vincennes, in 1828–30, and subsequently was associated with Godde in enlarging the Hôtel de Ville. In 1846 he was admitted to the institute, and in 1852 became professor in the school of fine arts. In 1857 he completed the conservatory of music at Geneva. He has written, among other works, *Cronologie des Rois d'Égypte*, which received an academical prize in 1846, and was published at the expense of the government in 1848.

ARCHITECT GEORGE A. MASTERS has completed the reconstruction of the Lyceum theatre, which was recently destroyed by fire, at a cost of $41,000. The reconstruction gave an opportunity for the introduction of several novel and valuable features in theatre construction, and creditable to Mr. Masters as a theatre architect. The decorations of the theatre will not be completed till the end of the season, when a St. Louis decorator will give it an interior that will compare favorably with any of Chicago's places of amusement. Messrs. McGraw & Downey, the owners of the property, have displayed a laudable enterprise in immediately rebuilding this theatre, and placing it on a par with the two other first-class places of amusement the west side is now in possession of.

ARCHITECT GREGORY VIGEANT has drawn plans for a new church for the First Presbyterian Society, of Fort Wayne, Ind., that, when completed, will be among the best church edifices in the state. It will be 136 by 110 feet, and will have a main auditorium with a seating capacity of 700. There will also be a lecture-hall capable of accommodating 200 persons. The Sunday-school department will be two stories in height. The structure will be Gothic in style, and will have outer walls of rock-faced ashlar. Complete, the structure will cost about $50,000. Mr. Vigeant has also plans for two two-story and cellar stone-front houses for Jacob Roth, on Warren avenue, near Wood street; also two two-story stores and dwellings for M. A. Devine, to be erected at Ravenswood.

AT the recent annual meeting of the Master Masons' Exchange, Joseph Downey, the well known mason contractor, was elected president, Wm. E. Tapper, Jr., secretary, and E. Gobel, treasurer. Mr. Downey is one of the best known, enterprising and honored of Chicago masons, and in honoring him with the chief office the exchange have done themselves a permanent good, and it assures them a successful and flourishing existence for 1884, as its many affairs will be managed with the precision and safety that is characteristic of the brick walls laid under Mr. Downey's supervision. The treasurer is also an old Chicago contractor, and the secretary, as the son of one of the old master builders who have helped to make the city what it is, is for this reason as well as for his own acknowledged worth, a fit man for the office. Mr. George C. Prussing, the ex-secretary, whose almost individual labors carried the association through the long strike of last spring, and to whom the citizens of Chicago owe so much, will still be active in the affairs of the Master Masons' Association.

ARCHITECTS BURNHAM & ROOT are constructing two residences at the corner of Forty-seventh street and Woodlawn avenue, which are a wide departure from any residences yet erected in Chicago. They are for Robert Strahorn, Esq., and F. R. Baker, Esq. They are the very ultra of old Elizabethan in construction — the first story being constructed entirely of timbers and strucco, and the second story walls are covered with California redwood shingles. The cost of the two houses will be about $50,000. These architects have also prepared plans for a ten-story office building for J. Q. Adams, to be located on the corner of the alley on Dearborn street, between Madison and Washington streets. It will have a frontage of forty feet, and a depth of ninety, and will cost in the neighborhood of $150,000. The plans have been ready since December 1st, upon which date Mr. Adams went abroad, and the work of excavation and erection will commence immediately upon his return. This improvement will give to this favorite part of the city another model office building.

A TOTAL of $700,000 has already been expended on the great West hotel, in Minneapolis, Minn. Of this amount there was expended for real estate $45,000, and for excavating and foundation $80,000. The excavating was done by F. L. Balch, the stone foundation walls were laid by J. Baxter, and the brickwork by J. Marble. The fireproofing which is in the hands of the Ottawa Fireproofing Co., of Chicago, will be finished in thirty or forty days, and it is expected to have the plastering nearly completed by February 15. Since the corner-stone was laid there have been two hundred and thirty-seven working days, but as ninety-four days were lost, work was actually pushed only on one hundred and forty-three days. There has been used, in the construction, $98,000 worth of stone and $95,000 worth of iron; 11,200,000 common brick and 580,000 red pressed brick have been laid, and 2,150,000 feet of lumber have been used. The building is 174 feet by 196 feet, and eight stories high, with a basement 16 feet in height. From the sidewalk to the top of the main roof the distance is 138 feet, 143 feet to the top of the chimney, and 200 feet to the top of the tower. The exchange is 70 by 90 feet. The billiard and bar room is 50 by 125 feet.

ARCHITECT M. L. BEERS has just completed a handsome residence for Dr. W. H. D. Lewis, on Fifty-third street, near Madison avenue; the building is Queen Anne style, 40 by 31, two-stories, cellar and attic high; first story is of brick veneer, second story and above that, including dormers and roofs, to be covered with black slate; the windows are of fine plate and ornamental stained glass; the interior is finished in Georgia pine, put together with cabinet work; there is a large reception hall, furnished with a handsome wood mantel and an ornamental screen with seats connecting them; on the other side of the hall is an alcove, also furnished with seats and screen. Dr. Lewis is sparing no expense to make his house complete with *all* modern improvements, including steam heating, electric gas-lighting apparatus, and electric call-bells, etc.; cost, complete, about $7,000. Also in course of erection, three-story and basement residence, 25 by 62 front, of Lake Superior rock-faced brownstone, red slate mansard roof, interior finished with Georgia pine and gumwood, with all modern improvements, for Mrs. B. I. McVoy, to cost about $12,000. Also flats for Washingtonian Home, at 297 West Polk street, to cost $4,200, and a residence for W. B. Titus, of Ottawa, Ill., to cost $10,000.

THE building of the Standard theatre, corner of Jackson and Halsted streets, which was opened to the public December 31, gives to the people of the west side a house that in appointments and decoration can hardly be excelled. The management have a house in which none but first-class performances should be admitted, and it is for this purpose that the theatre has been built. The decorations were executed by Almini, and as a study in Japanese fresco work merit the highest praise. The scenic artists, Messrs. Sosman & Landis, have placed upon the stage a setting equally laudable. The lighting by the Hickey is one of the special features; this burner, being a combination of the best known principles in gaslighting, has already been introduced into a large proportion of the theatres from New York to Denver. One special feature of the interior arrangement is the peculiar shape of the gallery front. It is similar to that of the Casino in New York, and gives an effect as well as a perspective vastly superior to that of the old stereotyped horse-shoe curve. Its front is composed of galvanized iron in design especially made for this theatre, and was executed by the firm of R. E. Dewey & Co., in a most satisfactory manner, as well as on an extremely brief notice. The design of the proscenium arch is executed in carved wood and stucco. It is understood the credit of this, with many of the ornamental and constructive features introduced, is due to Mr. E. E. Snyder, who as the architect's foreman had charge of the work, and has shown an intelligent conception of architectural forms and considerable ability as a designer.

ARCHITECT W. L. B. JENNEY is at present engaged upon the remodeling of the "Tobey Building," situated on corner of State and Jackson streets, owned by Mr. L. Z. Leiter, and formerly used for a furniture warehouse. The beginning of remodeling was the transformation of the old warehouse into an elegant office block, at a cost of some eighty thousand dollars. A very handsome feature of the new block is that from the entrance on State street to the top of the sixth story the walls are painted a soft, delightful terra-cotta color, which is most durable and very pleasing to the eye. The entrance-way displays an elegant showing of some American tile work. Besides this work, which is now completed, Mr. Jenney is about to begin work on the entire first story of the building, making of it a very elegant store, to be occupied by special tenants as soon as completed. The State street and Jackson street fronts are to be fine plate and stained glass. All of the old stone panelings are to be removed, making the whole of both fronts into one grand show window, the top of which is to be of stained glass in very handsome designs. The doorways are also quite unique, the openings being but about eight feet high, and above that is to be a gorgeous display of colored glass. This is undoubtedly the most important improvement in this part of the city in some time, and is in keeping with other steps southward, which our business houses are rapidly taking. Mr. Jenney says, "considering the time of the year, and the general depression of business, the outlook in building operations in this city for the coming year is remarkably good." This architect also has plans for a house and stable for Lidia C. Johnston, to be started as soon as weather will permit.

ARCHITECTS TREAT & FOLTZ have completed the plans for the new Episcopal Theological Seminary to be erected on Washington boulevard, near California Avenue, that will probably be accepted by the board of managers of the seminary. The plat of ground upon which the buildings will be erected has a frontage of 201 feet on the boulevard and runs north 214 feet to Park avenue. Upon this will be placed two separate buildings. A dormitory building, 33 by 80 feet in size, four stories high, divided into four sitting-rooms on each floor, each of which will accommodate two bedrooms. Running through this building from east to west will be a fire-wall of brick. The arrangement will be for thirty-two students' bedrooms with sitting-rooms, 16 by 14 feet, and bedrooms, 13 by 9 feet, all thoroughly ventilated and furnished with all conveniences. The main building will be 106 by 56 feet in size and three stories and basement in height. In the basement will be the kitchen, pantries, laundry, matron's room, fuel and store rooms and janitor's apartments. On the main floor will be a students' dining-room, 19 by 33 feet in size, connecting with the pantry and the professors' dining-room, 16 by 20 feet. Left of the main entrance will be a reception-room, 15 by 20 feet, and on the right of the entrance the dean's room, 16 by 20 feet. Opposite will be the main stairway, nine feet wide, and to the right of this stairway will be a general sitting-room, 20 by 26 feet. To the right of the main entrance will be the students' stairway. This will lead to the second story, in which will be the four lecture-rooms and library. To the right of the students' stairway will be a chapel, 24 by 42 feet, a school-room for preparatory students adjoining. These will be so arranged as to be accessible both from the outside as well as the main corridor. In the second story will be the library, 19 by 32 feet. The rest of the second floor will contain two suites for unmarried professors, with sitting-rooms, 15 by 20, and bedrooms, 10 by 15 feet, with necessary closets. These will be separated from the students' stairway by a glass door. The top floor of the building will be arranged so as to accommodate several additional students. The walls of the building will be of the best quality of pressed brick, with terra-cotta trimmings. The style will be English collegiate, and will be quite attractive. It is expected work on the buildings will be begun early in the spring. It is quite likely the board will arrange for the construction at an early date of six nice dwellings for professors on the college grounds. The plans now drawn contemplate the expenditure of $75,000.

New Publications.

SHEPARD & JOHNSTON'S ANNUAL for the year 1884. Chicago: 140 to 146 Monroe street.

This is one of the neatest publications of the year, handsomely printed, beautifully illustrated, and in keeping with all the work turned out by this well known and enterprising firm of job printers and publishers. Send for a copy.

JOURNAL OF THE SOCIETY OF ARTS. London: Published for the Society by GEORGE BELL & SONS, York street, Covent Garden.

This is a weekly publication, and its name indicates its purpose. The issue of December 14 is accompanied by a fine portrait of the late Sir William Siemens, D.C.L., LL.D., F.R.S., etc., which is from a photograph taken by Vander Weyde, on June 12, 1882. The reproduction is the work of the American and Continental Engraving Company, Munich. The *Journal* is well conducted and possesses many features of interest.

THE CALIFORNIA ARCHITECT, now in the sixth year of its publication, is offering three cash premiums and one a box of drawing instruments for the best plans and perspective of a house to cost $5,000, the drawing to be in the hands of the awarding committee, appointed from the San Francisco chapter of the American Institute of Architects, before the first day of May next. The plans are to be sent to the office of the California *Architect*. The committee consists of Architects G. H. Sanders, Albert Pissis and H. D. Mitchell. This journal is making an earnest effort to creditably promote the interests of the architects and builders of the Pacific slope, and deserves due recognition and success.

SUGGESTIONS ON LIBRARY ARCHITECTURE, AMERICAN AND FOREIGN, with an examination of Mr. Wm. F. Poole's scheme for Library Buildings. By J. L. SMITHMEYER, Associate in American Institute for Architects, Washington, D. C.

This is a pamphlet of thirty-one pages, and owes its origin to the inception of the Congressional Library enterprise, by act of Congress, May 3, 1873, and also a subsequent act passed June 8, 1880. There was large competition among architects and a great many plans were submitted to the commission appointed for its approval, the award for the best plan under each act being given to the author of this work. The whole subject of public libraries is discussed by Mr. Smithmeyer, and Mr. Wm. F. Poole's scheme for library buildings is searchingly reviewed, which gives the pamphlet a local interest here where Mr. Poole is so well known as at the head of our public library.

SOME OTHER FOLKS. By S. P. MCLEAN, author of "Cape Cod Folks," and uniform with the same. Published by CUPPLES, UPHAM & COMPANY, Boston. 1 vol., 12mo, cloth, $1.50.

The author in this book, which is just issued, sees *further* and *clearer* than she saw in her earlier books; she has stepped, as it were, out of the limits of her former thought and action into the center of the world's full, rich life — from the particular she has passed to the universal in human experience. The characters stand out clear, definite, real, as is only the case when an artist has not merely familiarized himself to their outward aspects and characteristics, but become at home in their inner world of thought, aspiration, passion, resolve, hope and love. It is to be hoped that this book will not only be given the warm welcome accorded "Cape Cod Folks," but will reach a wider field and exercise a broader influence upon readers everywhere.

HARDWARE TRADE CATALOGUE FOR 1884. KELLOGG, JOHNSON & BLISS, Chicago.

The illustrated and descriptive catalogue of hardware supplied to the trade by Messrs. Kellogg, Johnson & Bliss, the Chicago hardware dealers, is especially designed to assist merchants and all classes of consumers in selecting at their convenience such articles as they may require. It is designed for permanent reference and its illustrations show a vast array of standard salable goods, from which selections can be made in the general building and house-furnishing lines; also all kinds of mechanics' tools and cutlery With this volume in hand (which will be sent free upon application) the interior dealer can do the great bulk of his purchasing by mail just as well as by making a personal inspection of the goods, and will be dealt with by this firm just as fairly as if he were present in person to select his purchases.

BUILDING SUPERINTENDENCE: a Manual for Young Architects, Students, and others interested in Building Operations as carried on at the present day. By T. M. CLARK, Fellow of the American Institute of Architects. Boston: JAMES R. OSGOOD & Co., 1884.

The above is the title of a handsome volume of some 330 pages, bound substantially in muslin, containing a large number of cuts, and, disclaiming to be a treatise on the architectural art, or the science of construction, is a simple exposition of the ordinary practice of building in this country. The book is especially written for the benefit of, and will prove a valuable aid to, the younger members of the architectural profession who are occasionally called upon to direct building operations; and for the work in question they will certainly thank the author for the very thorough and masterly manner in which he has performed his work. Every subject which can in any possible way be applied to, or is a part of Building Superintendence, is thoroughly treated in this work. The progress of a typical building is fully described, from the first breaking of ground to the completion of the work, showing the successive stages of construction and the order of the delivery of material on the ground, such as they would be found by the superintendent in his periodical visits. In the chapters of this book he has treated of all the different kinds of work, and presents a standard by which each sort can be judged. He takes the young architect by the hand, as it were, and goes with him over the whole architectural ground in detail, and nothing whatever seems to escape notice. He is pointed out the many ways in which defective materials or construction are covered up, and is reminded to work before the building arrives at so advanced a stage that it can no longer be detected or remedied. Contracts is the subject of a chapter, and a form of contract for building is given. We commend this work to the student and young beginners in architecture as one which will prove of value to them in the prosecution of their complex studies. Price $3. For sale by JANSEN, MCCLURG & Co., Chicago, Ill.

Synopsis of Building News.

Chicago.—Architect L. B. Dixon, formerly of Dixon & Townsend, reports the following: A two-story villa, 26 by 55 feet, for Mr. J. A. Lane, in process of erection on Greenwood avenue, between Forty-eighth and Forty-ninth streets, to cost when completed, $7,000. Just started a two-story Gothic residence, 30 by 64 feet, all modern improvements, for Mr. Geo. Driggs, situated on Cornell avenue between Fifty-fourth and Fifty-fifth streets, to cost $7,500. Also two flats for J. L. Woodward on Thirty-third street near the lake, Anderson pressed brick front, with stone trimming, cost $15,000. Also a residence 25 by 72 feet, two stories and basement high, front of Pennsylvania greenstone, plate and stained glass windows for Mr. J. W. Knight, on Michigan avenue near Sixteenth street, to cost $12,500. Also a residence on Forest avenue near Thirty-first street, 25 by 68 feet, three stories high, front of pressed brick with brownstone trimmings, finished with hardwood, cost $13,000. Also a residence for Mr. W. A. Stevens on Wabash avenue near Twenty-sixth street. Residence for Mr. M. Mainard, Wabash avenue near Thirty-third street, and a residence for Mr. John Westervelt, on Wabash avenue near Fifty-fourth street, for which plans are not completed.

Cincinnati, Ohio.— Architect Lucian F. Plympton: For Elijah Coombe, two three-story double houses, walls of southern Ohio brick, slate roofs, 71 by 45 feet, cost $10,000 each; under way; Douglass, contractor. For Frederick Hassaureck, three-story residence, walls of Indiana limestone, pitched face for first floor, second floor, brick plastered on exterior, slate roof, area 65 by 65 feet, cost $30,000 (projected).

Des Moines, Ia.—The present condition of the building trade is slow to fair, with the outlook for the coming year promising.

Architect B. Schreiner: For Baker & Patter, three stores, brick, with stone trimmings, 60 by 110 feet, cost $20,000; I. Barley, brickwork, and J. Garrety, carpenter. For L. Hast, two stores, brick, with stone trimming, 20 by 80 feet, cost $4,000; I. Barley, brickwork; E. Baker, carpenter. The above stores are completed. For J. E. Cochran, two stores, brick, with stone trimming, 46 by 38 feet, cost $5,000; under way; I. Barley, brickwork; C. VanHorn, carpenter; under way. For L. P. Miller, three stores, brick, with stone trimming, 44 by 60 feet, cost $10,000; completed; Stradley & Larson, contractors; W. McNulty, carpenter. For M. H. King, two stores, frame, cost $3,500; nearly completed; Wm. Christy, Jr., builder. For T. L. Smith, two stores, frame, cost $2,000; completed; O. Oleson, builder. For F. Stehn, two stores, frame, cost $3,000; completed; J. A. Carlson, builder. For W. D. Christy, two stores, frame, 16 by 26 feet and 36 by 52 feet, cost $2,000; under way. For J. W. Barker, two houses, additions, 26 by 30 feet, cost $2,500; completed; J. Garrety, builder. For Lee Township School District, two-story brick, shingle roof, 26 by 32 feet, cost $4,500; completed; J. A. Carlson, builder. For Mattes Bros., three-story brick, 84 by 132 feet, cost $75,000; projected. For S. J. Hesler, three-story brick, 60 by 80 feet, cost $6,000; projected. For John Huglin, three-story brick, 40 by 75 feet, cost $5,000; projected.

Prices of labor at Des Moines, Ia., range as follows: Bricklayers, $2.50 to $4; carpenters, $2.50 to $3.50; gasfitters, $2.50 to $3; laborers, $1.50 to $1.75; painters, $3 to $4; plasterers, ditto; plumbers, ditto; stonemasons, $2.50 to $4; stonecutters, $3; stonesetters, $3; roofers (tin), $1.75 to $2.25; slaters, $3 to $5; stairbuilders and steam fitters, $2.50 to $3, and $3 to $4 respectively.

Dubuque, Ia.—The building prospects for the ensuing year are good, although but little work as yet is placed in the hands of the architects.

Architect F. D. Hyde: For Dr. Howe, Dubuque, four-story brick store, pressed brick front, 22 by 114 feet, cost $8,000; foundation in but contract not let yet. For Dr. Morton, Iowa Falls, Ia., two-story frame cottage, cost $2,500; architect is now preparing the plans. For W. S. Bradley, Dubuque, addition to business block, brick, three stories, 22 by 52 feet, cost $4,000; architect preparing plans.

Marion, O.—The contract for the construction of the new court-house at Marion, O., was let on the 7th inst. to Leffler & Bland of that place, for the sum of $98,990. The iron work goes to the Canton Bridge Co.; the roofing and galvanized iron to S. & F. R. Saiter, of Marion; stone work to a Toledo firm, and the painting and plastering to parties here. Leffler & Bland are the same firm who were awarded the contract one year ago, but which was subsequently set aside by the Supreme Court, in consequence of lower bidders' dissatisfaction. This time there appears to be harmony, and the building will, doubtless, be commenced early in the spring.

Minneapolis, Minn.—The record of building operations at Minneapolis for the past year exceeds all previous records. The feature of the year's growth has undoubtedly been the number of residences erected, and the uncommonly large number of brick and frame stores, outside the fire limits, along main avenues of trade, and in outlying sections of the city. It has not been without important additions, however, to the business structures in the heart of the city; and the future now points to the growth in this direction. There promises to be fewer small buildings, and more large and substantial ones constructed in the future. The following is a comparative statement of what has been accomplished in building during the year 1883.

	1883.	1882.
Number of stores built	590	308
Number of residences	2,539	1,847
Expenditure for dwellings	$5,035,706	$3,529,375
Expenditure for stores	3,152,075	2,294,000
Expenditures for miscellaneous buildings	834,300	2,201,700
Aggregate expenditure	9,390,450	8,375,075

The amount expended on the construction of 255 brick stores was $2,600,000, and on 355 frame business blocks, $551,450. The amount to be expended on brick business blocks and public buildings now planned, or upon which work is being done during 1884, is estimated at $2,987,000, which will give a grand total of $12,277,450. The work in hand at the present time includes the following more important structures at a cost of $100,000 and upward, and all of which will be completed during the present year:

West hotel, next year	500,000
Tribune building, Fourth and First avenues	400,000
Hennepin avenue office building	250,000
Union depot	200,000
Government building	200,000
Chicago, Milwaukee & St. Paul elevator	200,000
Northern Pacific elevator and building	300,000
Minneapolis Elevator company, elevator	200,000
C. St. P. M. & O., elevator	200,000
Loan and Trust company, Nicollet avenue	100,000

Minneapolis is evidently one of the most progressive cities in the Northwest.

St. Louis, Mo.—The following permits were taken out on the 11th inst.:

For Dr. J. H. McLean, to rebuild his stores and factory at Broadway and Biddle, cost $50,000. For John A. McKeighen, dwelling on Pine street, between Cabanne and Vandeventer avenues, cost $10,000. For Camp Spring Milling Company, an addition, cost $5,000. For Simeon Ray, three dwellings on Delmar avenue, between Cabanne and Vandeventer avenues, cost $5,000 each. For Dr. S. C. Van Houten, two dwellings on Delmar avenue, between Cabanne and Vandeventer avenues, cost $5,500 each. For James A. Gregory, stone foundation for two dwellings on Morgan street, between Channing and Ware avenues, cost $1,500. Total, $92,000.

THE important subject of sewer-gas traps is agitated by almost every sanitary authority, and is continually receiving attention from inventive minds bent upon devising some adequate preventive of sewer gas. The latest and one of the most practical methods is a "metallic bar," otherwise a deposit of mercury through which the water must pass, as it is too heavy to be syphoned out or dry up. A. Edwards & Co., of New York, claim for it extraordinary merits.

THE INLAND ARCHITECT AND BUILDER

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THE INLAND ARCHITECT AND BUILDER.

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WITH the present number THE INLAND ARCHITECT AND BUILDER enters upon its second year. Its growth in circulation, in advertising, in influence, in popularity, has far exceeded the most sanguine expectations of its publishers. At the beginning of its new year, and the commencement of volume III, its publishers desire to express their gratitude for the hearty welcome it has received, not alone from the architectural and building fraternity, but from many other professions and trades that have done so much to aid in the success it has achieved. During the coming year THE INLAND ARCHITECT AND BUILDER will be greatly improved in all its departments. It will continue to be a journal devoted to the interests of the architect and builder, and will endeavor to aid, in every way it can, the advancement of the architectural and building arts, and will also aim to embrace in its scope every kindred branch of those professions. Sample copies of this issue will be sent to many persons who are not subscribers, with the earnest desire that they will examine it and decide upon the value of such publication to them.

IT is certainly time the public were waking up to the fact that our public schools are not what they should be, both as regards heating and in ventilation. It has not been wholly because architects have planned improperly, but largely because the school boards have been too full of theory and surprisingly lacking in practical knowledge. The attitude of the average board was exemplified in the criticism made by some members of that of Chicago upon a certain high school building, that really, in sanitary as well as other appointments, is superior to any of those previously built, when it was said it had too much ventilation. It is not so much a question of whether a school building can best be heated by hot-air or by steam, for each system has many advantages; but what will be the most healthy and yet cost the least. These two questions come so close together in the popular mind that the sanitary aspect is almost wholly lost sight of in that of the cost. No system will heat or ventilate a building without the liberal use of coal, and when the use of coal is restricted the engineer is too apt to turn off the ventilating apparatus, and save his heat. With an idea of saving coal the heating apparatus is, as a rule, shut down from the hour of school closing till the engineer appears the next morning, and then the apparatus is expected to warm the building comfortably in a few hours, which he does at an expense of coal greater than would be incurred should the fires be kept burning all night. So much for the financial side. The sanitary is even more open to criticism. In a certain schoolroom a hot-air register was located directly in front of and less than four feet distant from a desk where the pupil sat all day in a current of air that left the register at a temperature of more than two hundred degrees, and more than ninety on the desk in front of the pupil, and still if the pupil, after sitting in such a current of air for a few weeks, should become sick, it would be charged to too much study. The whole system of building public schools needs close revision. Capable architects and sanitary engineers should be employed, the best apparatus purchased under their direction, and then the cost should not be counted in money saved, but according to the results obtained for the comfort and health of the pupils. Following this rule, school boards will never be criticised by the tax-paying public, nor will they be compelled to expose their want of practical knowledge through making the criticism of "too much ventilation."

THE long strike of the window-glass workers, which was inaugurated seven months ago, against a reduction of from ten to twenty per cent, came to an end on the 30th ult. The conference committee, composed of members of the Window-glass Workers' Association and Western Manufacturers' Association, have been wrestling together for many months, seeking for something of a satisfactory nature on which to base a settlement; the result of which is, the workers resume at last year's wages, which were paid on the 1st inst., and until July 1 the wages will be governed by a sliding scale based upon the price of glass. The present card-rate is sixty and twenty per cent. If prices advance the wages of the workmen will be increased accordingly, and a corresponding reduction will be made in case of a decline in rates. The scale will be subject to changes every four weeks, the employes to be notified if any change is necessary. Hereafter workmen making over forty-eight boxes per day will be paid double wages, half of which will go to the Workers' Association. While the settlement is regarded as a victory for the workmen,

great concessions were made by them before a settlement could be reached. By the resumption about three thousand men will be furnished employment at once, while as many more will find work in the factories of the West. The strike has cost both manufacturers and workmen many thousands of dollars, and has entailed much suffering on the families of many of the strikers.

THE draughtsmen of the enterprising and progressive city of Minneapolis, Minn., have taken a step in advance of their professional brethren in most of the older cities in the West. They have just formed an association under the name of the "Architectural League of Minneapolis," with the following officers: Geo. E. Bertrand, president; H. W. Jones, vice-president; Francis W. Fitzpatrick, secretary; Walter S. Pardee, treasurer, and a roll which starts the organization with a membership of twenty-four (Fellows). The association is divided into four classes of members, designated as follows:

1. Fellows; those who have studied architecture at an institute of technology, or in an architect's office, for at least three years, having all the rights and privileges, voting, holding office, use of rooms, etc. etc.
2. Juniors; young men not having yet completed the three years' study necessary to admit them to fellowship.
3. Associates; practicing architects, artists, engravers, engineers, etc.; and
4. Honorary members; parties taking an interest in the society and elected by a three-quarters vote, who, with the associates and juniors, enjoy all privileges except those of voting and holding office.

The objects of the association, as set forth in Article 2 of the constitution, are

"To improve the social relations of the students of architecture in the city; to facilitate their study of both the artistic and scientific elements of the profession, and to create a more just and elevated public appreciation of art."

The means taken to reach the foregoing objects are, according to Article 3,

"The providing of a suitable apartment wherein are to be collected designs, models, pictures, casts, specimens, etc. etc.; the regular meeting of the members for discussion and interchange of ideas; the forming of clubs among the members for modeling, sketching, etc., or such other means as may be considered the most efficient for the study of architecture and the general culture of art."

The purposes the League has in view in forming the association are in every essential commendable, and we congratulate the draughtsmen of Minneapolis upon their enterprise and evident devotion to the progression of their art and their own advancement.

THE twenty-ninth annual report of Dr. Norman Bridge, president of the board of education of this city, for the year ending June 30, 1883, has just made its appearance, and contains much important information of both interest and value. As a matter of special interest at this time, inasmuch as it is one of the timely topics of the day, and receives no small share of attention in various parts of the country, it is gratifying to find our worthy superintendent an open and earnest advocate of manual training schools, taking the view that they are nothing but high schools with the practical part added. Dr. Bridge says:

Many of the boys who leave the high schools before the end of the course do so because obliged to go to work; others, because the bustle and promises of business are more alluring than school, and they prefer to go to work. Can the course not be made more inviting to them without lessening, but with increasing, its usefulness for them? Most undoubtedly the addition of a course in manual training and business methods would accomplish this end. The experience of the schools of manual training is, that constant care must be exercised lest the pupils neglect their literary studies for the drawing and the shop, the tools and the things. The addition of some short course of this kind, even tentatively and in a small way, to our high-school curriculum, for such boys as elect to take it, would at once, if we may judge by the experience of others, increase the charm and usefulness of these schools for a very considerable number of pupils, many of whom now receive little or no instruction after leaving the grammar school. It is said that there is no room in our high-school course for industrial studies, and that therefore the suggestion is impracticable. But such a position is absurd, since the manual training schools are nothing but high schools with the practical part added and some or all the studies of the dead languages cut off. It cannot be impossible to engraft a department of manual training upon our high-school course, nor need the trial step be costly. The time has come for an innovation in this direction, and the board ought to take up the consideration of the subject with this end in view.

Up to the present time the best example of an industrial and mechanical training school to be found in the West is the one connected with the Washington University at St. Louis. Some time ago the managers of the university gladly relinquished its night school to the school board of that city, and proceeded with the development of a scheme of mechanical education, which culminated in the establishment of the existing manual training school. It is now established on a solid basis, and its practical working, and the benefits sought to be conferred, have been closely watched by some of the most influential citizens, who have demonstrated their earnest sympathy with the movement by continuous contributions toward its support, which now aggregate a large sum. A step in advance has also been taken in that city by engrafting upon one or two of the public schools — notably the Stoddard school — a system of manual training, the practical and successful workings of which, it is claimed, have exceeded the most sanguine expectations.

A MASTER plumber, of Chicago, on being asked why it was that his profession, perhaps more than any other, has become the object of so many coarse jokes and sneers at the hands of both the press and the public, made reply:

"It is all because the profession is full of chumps and tinkers who are unworthy of the name of plumber. They are not fit to be shoemakers or blacksmiths, much less plumbers. Why, sir, plumbing is the most skillful and artistic work to be done about a building. You'll not find an architect who knows the first principles of our business. These tinkers around town who have set up in the profession for themselves, used to be mere helpers at $7 and $8 a week. They found they could open up a shop for a few dollars, get the patronage of their acquaintances, and make a little more — say $10 or $12 — and this is what ruins the legitimate and practical members of our association."

The American plumbing practice, the proper method for granting license, the decay of the plumbing apprenticeship system, plumbing modern and old, together with the favorable influence in many directions which the Master Plumbers' Association of Chicago, and similar organizations in other cities, are asserting, are timely topics for discussion, and we are glad to find them so ably agitated in some of the leading sanitary and building journals of the country. The answer to the query above propounded certainly contains very much that is true. In former days, the plumber acquired a knowledge of his trade only after serving at it as a regular apprentice for a number of years, at least from three to five, while in England the old system of seven years' servitude was insisted upon in regard to an apprentice; and at the end of his term, the master was to make him "take up his freedom, according to the usage of the city." But the old condition of things no longer exists, and a master of the present day has a great many embarrassing circumstances to contend with if he undertakes to teach a boy his trade. The whole system of plumbing has undergone so many changes—so many new devices have been introduced—that, as an old master plumber says: "In this day the plumber has very little to do except setting up the different articles which have been made by others." It may be said that plumbing at this day "has become the most skillful and artistic work to be done about a building"; and we may also add that there is scarcely a branch of the building trade which needs more careful inspection than plumbing work. The evils complained of in the plumbing profession should be remedied; licenses should be granted only to those who are thoroughly qualified to receive them; and perfect knowledge should be exacted from all new applicants for license. Then there would be fewer "chumps" and "tinkers" who are a disgrace to, and cast dishonor and censure upon, the "profession." Schools must be established where young men can go day or evening and receive instruction in practical plumbing; or it should form a part, and a very important part, in the mechanical studies pursued in the manual-training schools. As a specially distinctive organization, the Master Plumbers' Association must use all the means at its command to elevate plumbing to the highest plane of thoroughly practical and skilled workmanship.

MR. F. J. REID, special representative of THE INLAND ARCHITECT AND BUILDER, having recently returned from Europe, where he spent several months during the latter

part of the past year, left Chicago on Tuesday last for the East. During his absence he will visit the principal cities, and will personally call upon many of our readers and advertising patrons. We feel assured he will meet with a kindly greeting.

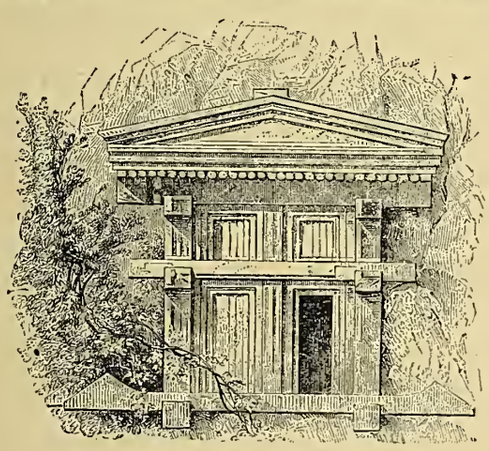
Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO

BY W. L. B. JENNEY, ARCHITECT.

PART X.—THE CLASSIC PERIOD.

ANOTHER interesting group of architectural remains in Asia Minor is in Lycia, which was, with the neighboring islands, the most important of which was Rhodes, inhabited by a colony of Ionians during the Greek period. They engaged in commerce and were rich and flourishing.



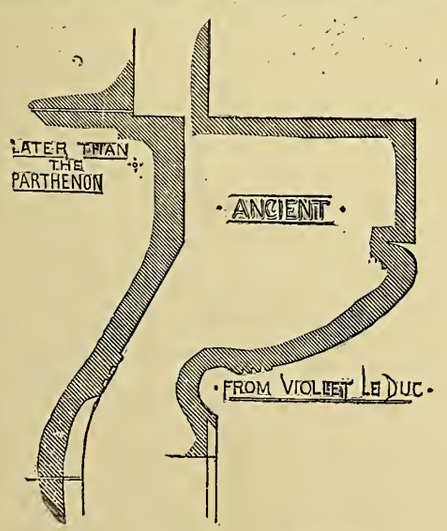
Rock Cut Lycian Tomb. (Taxier Asiè Mineure.)

We will now return to Hellenic Greece and to the Doric, which was the true Grecian style.

The Trojan war was the last great military event of the Pelasgic civilization. The next four hundred years were to the architect the dark ages of Greece. At length architecture makes its appearance, after this long obscurity, at Corinth, and in a form very different from anything found at Mycenæ. It was no longer elegant and ornate, like the Pelasgic arts of Asiatic growth, but was massive, of bold proportions, and strongly suggesting an Egyptian origin.

In the Parthenon the height of the column is 6 diameters; in the temple at Corinth, 4.47 diameters; in the temple at Delos, of the time of Philip, 7 diameters.

Compare these two profiles of the Doric capital.



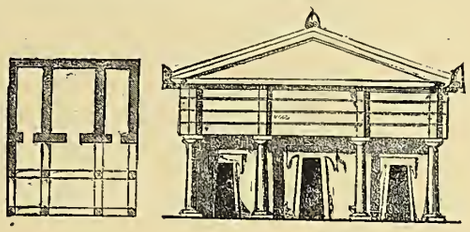
Profiles of Doric capitals. (Viollet-Leduc.)

It has long been held in popular belief that the Greek Doric is a reproduction in stone from a wooden original. This is erroneous, as can easily be demonstrated.

The oldest seems to be of the time of the Persian congress under Cyrus. Anything older must be in wood, as it is only in its infancy that stone construction so closely resembles the wooden original, although forms originally in perishable material are long preserved, as in Egypt.

As soon as the workmen become accustomed to the use of stone, they abandon this close copying of the wooden forms.

Vitruvius tells us that the Etruscans had two classes of tombs, one circular and one rectangular.



Plan and Elevation of an Etruscan Temple. (Fergusson.)

At Beni Hassan, on the Nile, nearly 3000 B.C., in a rock-cut tomb, was used what is known as the proto-doric column.

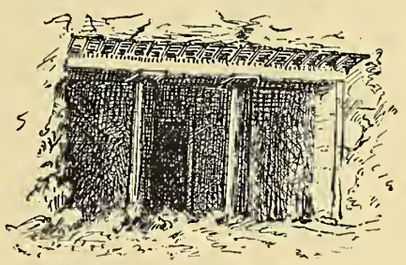


Fig 1. Tomb at Beni-Hassan.

Another that is still nearer the Doric of the Greeks, was at Karnac, certainly one thousand years before anything in Greece.





Now examine the Parthenon, the culmination of Greek art. A Doric temple of the time of Phidias and Pericles, about the year 438 B.C. Its columns are but a refinement of those of Beni Hassan and Karnac. The lintel is used as it was used in Egypt. The Asiatic influences are found in the pediments and the cornice. To the Greek is due the adaptation of these to his wants and the exquisite refinement and elegance of proportion that marks the entire structure and places it at the very head of all architectural constructions.

There is now no doubt but what color was used externally in both the Doric and Ionic orders. In the Doric, generally speaking, all those parts which by their position were protected from the weather, were colored, while those parts particularly exposed were left plain. In the Ionic the carved parts were gilt or picked out with gold on a colored ground. Existing remains show that color was used to heighten the effects of the carvings.

The Ionic order was of Asiatic origin; its prototype is found on the plateau of Persepolis. In the hands of the Greeks the order was much simplified and treated with all that artistic ability that they displayed in everything they touched.

The Ionic order has more mouldings, and is richer, lighter, more elegant and more graceful than the Doric. The column has a base.

The neck moulding of the Ionic capital is the Assyrian honeysuckle, carved with exquisite feeling.



Altogether the order is very beautiful; still, for temple architecture, the Doric must rank as a higher class of art, as being in all its details best adapted to its purpose. A well-known and very charming example of the Ionic is the Erectheum on the Acropolis at Athens.

Mooresque Decoration.

OUR illustration of the interior of Oriental Masonic Hall will give but an inadequate idea of the brilliant and artistic decorations which have just been completed, and which may be considered now as perhaps the best exponent of oriental decoration in the West. This hall was built some years ago for the exclusive use of the different bodies of the Masonic fraternity. Its architecture is Moorish in design and imitates the Alhambra, which is the very summit of perfection of Moorish art, as is the Parthenon of Greek art.

The Moors ever regarded as true, what we of the present day hold to be the first principle in architecture,—*to decorate construction, never to construct decoration.* In Moorish architecture, not only does the decoration arise naturally from the construction, but the constructive idea is carried out in every detail of the ornamentation. We believe that true beauty in architecture results from that "*repose which the mind feels, when the eye, the intellect and the affections are satisfied from the absence of any want.*"

The Mohammedan races, and Moors especially, have constantly regarded this rule. They ever regard the useful as a vehicle for the beautiful, and in this they do not stand alone; the same principle was observed in all the best periods of art. It is only when art declines that true principles come to be disregarded; or, in an age of copying, like the present, when the works of the past are reproduced without the spirit which animated the originals.

Harmony of form appears to consist in the proper balancing and contrast of the straight, the inclined, and the curved. It is to the neglect of this obvious rule that we find so many failures in paper-hangings, carpets, and more especially articles of costume. The lines of papers generally run through the ceiling most disagreeably, because the straight is not corrected by the angular, or the angular by the curved. So of carpets: the lines of carpets are constantly running in one direction only, carrying the eye right through the walls of the apartment.

When we examine the system of coloring adopted by the Moors, we shall find that as with form, so with color—they followed certain fixed principles founded on observations of nature's laws, and which they held in common with all those nations who have practiced the arts with success.

The ancients always used color to assist in the development of form, always employed it as a further means of bringing out the constructive features of a building. The colors employed on their stucco-work were in all cases the primaries, blue, red and yellow (gold). The secondary colors, purple, green and orange, occur only in the Mosaic dados, which, being near the eye, formed a point of repose from the more brilliant coloring above. This also appears to be in accordance with a natural law; we have the primary blue in the sky, the secondary green in the trees and fields, ending with the tertiaries on the earth; as also in flowers, where we generally find the primaries on the buds and flowers and the secondaries on the leaves and stalks.

The arched ceiling proper of the hall is the primary blue of the sky and studded with golden stars, and to all true masons emblematic. The recessed side sections of the ceiling, formed in many bays with arched ceilings and intersecting oriental arches, are gorgeous in their colorings. On the moulded surfaces is placed red, the strongest color of the three, in the depths, where it might be softened by shadow; blue in the shade, and gold on all surfaces exposed to light, for it is evident that by this arrangement alone could their true value be obtained. The several colors are either separated by white bands, or by the shadow caused by the relief of the ornament itself—and this appears to be an absolute principle required in coloring: colors should never be allowed to impinge upon each other. The columns supporting the arches are in different shades of gold bronzes; the flat surfaces between show interlaced patterns of diaper work. In coloring the grounds of the various diapers, the blue always occupies the largest area; and this is in accordance with the theory of optics, and the experiments which have been made with the prismatic spectrum. The rays of light are said to neutralize each other in the proportions of three yellow, five red and eight blue; thus it requires a quantity of blue equal to the red and yellow put together to produce an harmonious effect, and prevent the predominance of any one color over the others.

In the reconstruction of the hall the artist conceived the happy thought to decorate and improve the large windows by introducing rich fretwork in the heads of the window recesses, which come down to the spring of the arches; below these, in the opening, hang heavy oriental curtains, enhancing the general beautiful effect, which with the handsome upholstering of the seats, the richly geometrical oriental carpet, under a brilliant illumination of hundreds of gaslights, make this the most elegant Masonic hall in this country. The artist, Mr. H. J. Milligan, so widely known through the excellent decoration he has produced in many of the churches, and public and private houses, in Chicago and throughout the West, has proven himself well worthy the confidence of the owner of the building, A. E. Walker, Esq., to whose liberality it is (and that without regard to cost) that Chicago and the Masonic fraternity owe and are enabled to exhibit this most artistically decorated hall.

Art Styles in Furniture.

WHILE the term architecture is generally understood to apply to the science or art of building, and architect, as designating a person who designs or is a professor of building, there is another distinctive individual who cuts a very important figure in the domestic world as the architect of household furniture. He is the family architect, so to speak, and to the apparently inexhaustible skill and ingenuity of his busy and fertile brain, we are indebted for the multifarious shapes and ornamentation of all the furniture made. By the cleverness and ingenuity he displays in unfolding his skill he makes the home cheerful—

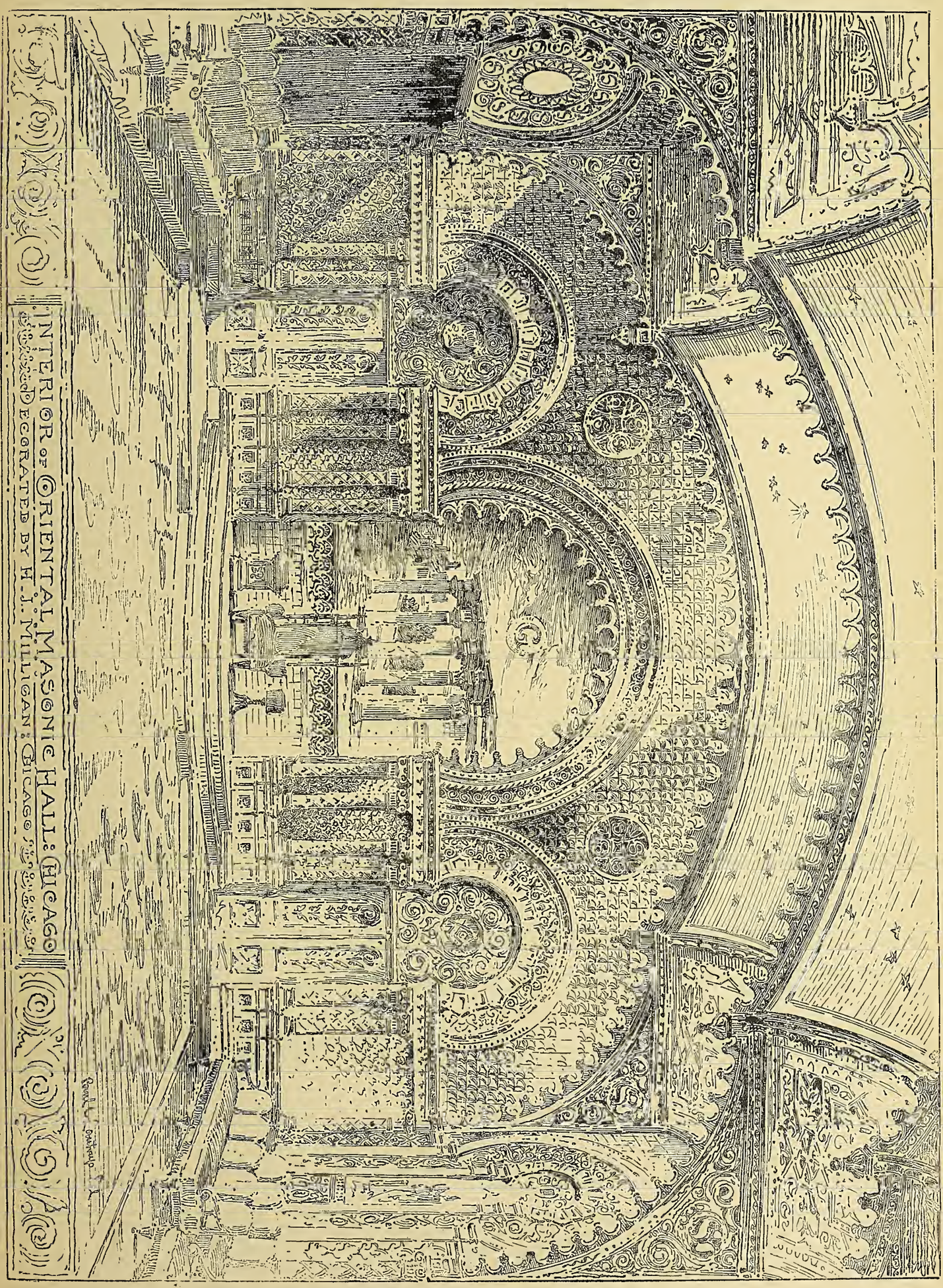
"A thing of beauty and a joy forever."

He shows that the knowledge of his art is of indispensable value to the world at large; for, while it is possible to do without very many things which add to the comfort and adorn the household, it would be impossible to get along without furniture. Chairs to sit in, bedsteads to sleep on, tables to eat from, and many other articles of the household, could not be disregarded, for without these all household decoration and ornamentation would be not only useless but preposterous. It is altogether probable that very few persons, even among the more intelligent and thoughtful, who step into a large and thoroughly equipped furniture establishment, rich in its display of costly furniture of rosewood, mahogany, walnut, cherry, oak, maple, etc., ever give a thought to the architect whose artistic genius and skill have planned every design, from the plainest article to be seen to the most expensive and elaborate; exquisite in their delicate and costly carved work, and resplendent in their superb finish. In keeping with the caprices of the times, furniture has its periodical changes in patterns and modes of construction. Every now and then, in the lapse of a few decades, there is a craze for the Antique, and the works of ancient artists are sought after to find out how they painted, and made statues and vases and articles of bric-a-brac, as far back as the days when the Greeks and Romans were in the height of their splendor and power. Today there is a revival of this craze, and designers are busy on antique chairs and bedsteads, in use during the Elizabethan period, or when the earlier kings of France were on the throne. Almost anything in the furniture line which bears a striking resemblance to the antique, not only in construction but in color, which imparts the appearance of age, meets with ready disposal. Another feature of furniture designing at the present time is a revival of the Renaissance, a style of decorative art freer than the antique, and which became so prominent when revived by Raphael in the time of the pontificate of Leo X. There is the English, French and Italian Renaissance, all different in many respects. The style most adopted in this city seems to run after the Italian. Still another style of ornamentation, which is coming into use largely, is the Rococo, a kind of florid embellishment which prevailed, more especially in France, at the close of the eighteenth and at the beginning of the nineteenth centuries. By some it has been thought to be rich, though luxuriant, and by others it is condemned as a weak attempt to refine and improve upon the purest models of art, producing capricious, fantastical or childish results. It is generally used to denote what is *outré* or fantastic in decorative art, and in many respects bears a close resemblance to the ornamentation of China and Japan.

Carved work on bedsteads, bureaus, sideboards, etc., is becoming very elaborate and popular. New styles of mirrors have come in use, and very few persons who are furnishing handsome and expensive homes will buy other than mirrors with a beveled edge. The effect produced is at once pleasing, while it gives to the mirror an appearance of thickness and strength. The demand for furniture made from genuine woods is much greater than it has been, and imitation furniture of the more expensive woods is growing in disfavor. Ebonized wood for parlor and chamber uses has probably seen its best day, and is fast losing its popularity. Bronze ornamentation for furniture is also becoming a feature, and imitations of the eccentric bronzes of an age long since past have again come into play. Many of them are well executed, the figures being in relief, and vary in character

"From grave to gay, from lively to severe."

There seems just now to be on the tapis a metal age, and within a short period it is likely we shall witness another complete revolution in many articles which add to the comforts of the home. Wrought-iron work, handsome in style and in shape, artistic, light but strong, is working its way to the front, and it will soon, for all purposes of ornamentation and for practical use, perform a useful part in the household. Brass bedsteads are already popular, and are both handsome and ornamental; but the day of elaborate changes and workmanship in wrought-iron is yet to come.



INTERIOR OF ORIENTAL MASONIC HALL, CHICAGO.
ENGRAVED BY H. J. MILLIGAN, CHICAGO.

The Chicago Manual Training-School.

THIS institution was most auspiciously opened on the 3d inst., although the building is not yet complete. The school opened with an enrolled pupilage of sixty-five boys between the ages of fourteen and fifteen years. Many of our most substantial citizens were present, including members of the Commercial club, who contributed so liberally of their means toward the erection of this splendid school-building. The opening address of the president of the board of trustees, Mr. E. W. Blatchford, covered two points, viz.: First, good moral character; and, second, the ability to do things. The object of the manual training-school, as set forth in the charter, is as follows:

Instruction and practice in the use of tools, with such instruction as may be deemed necessary in mathematics, drawing, and the English branches of a high-school course. The tool instruction, as at present contemplated, shall include carpentry, wood-turning, pattern-making, iron chipping and filing, forge-work, brazing and soldering, the use of machine-shop tools, and such other instruction of a similar character as may be deemed advisable to add to the foregoing from time to time, it being the intention to divide the working hours of the students, as nearly as possible, equally between manual and mental exercises.

COURSE OF STUDY.

The following is the proposed course of study:

FIRST YEAR.

Arithmetic, algebra, English language, history, physiology, physical geography, free-hand and mechanical drawing, shopwork—carpentry, wood-carving, wood-turning, pattern-making, proper care and use of tools.

SECOND YEAR.

Algebra, plane geometry, physics, mechanics, history, literature, geometrical and mechanical drawing, shopwork—forging, welding, tempering, soldering, brazing.

THIRD YEAR.

Geometry, plane trigonometry, bookkeeping, literature, political economy, civil government, mechanics, chemistry, machine and architectural drawing, machine-shop work, such as fitting, turning, drilling, planing, etc.; study of machinery, including the management and care of steam-engines and boilers.

The hours of study will be six daily—from 9 to 3:30, with a half-hour's intermission, and the plan pursued, for some time at least, will be to divide the school into three classes, of about twenty to twenty-five pupils each. The studies will then go on in rotation, three hours being given to manual training, inclusive of drawing, and three hours to the regular course of study as given in the public schools, the text-books being similar to those in use in the high schools. The training-school differs from the high school in omitting from its required studies foreign and ancient languages and in giving prominence to mechanical drawing—the principal difference being, of course, the scientific manual instruction which the school was especially founded for.

The rules regarding admission are as follows:

Candidates for admission to the first year must be at least fourteen years of age, and must present sufficient evidence of good moral character. They must pass a satisfactory examination in reading, spelling, writing, geography, English composition, and the fundamental operations of arithmetic as applied to integers, common and decimal fractions, and denominate numbers. Ability to use the English language correctly is especially desired. No pupil will be retained whose habits are of an idle or immoral character, or whose companionship would be likely to be an injury to his fellow pupils.

The corner-stone was laid September 24 last, and the work, under the direction of the architect S. S. Beman, has progressed since with satisfactory rapidity, all things considered. The building will accommodate 350 pupils, and will be provided with ample space and facilities for the prosecution of the course of practical and theoretical instruction set forth in the curriculum. It will also be equipped with every modern convenience, including a steam-engine, marble lavatories, electric bells, etc. Speaking-tubes from the director's office communicate with all parts of the building.

It is expected that the building will be fully completed early in March, and it will be formally opened with appropriate ceremonies as soon thereafter as convenient.

Pullman's Palace Car Co's Offices.

THE erection of these offices for this company by architect S. S. Beman, which are now almost ready for the roof, gives to Chicago the largest and architecturally the most imposing office building yet erected. It is built upon foundations and first story of red Jonesborough granite with St. Louis pressed brick above ornamented liberally with belt cornices and trimmings of red terra-cotta; a belt course of this material above the second story producing one of the finest effects and possessing an artistic richness that is unsurpassed. The building measures 127×170 feet and is ten stories in height or one hundred and sixty-five feet to the top of the corner tower. It is thoroughly fireproof in construction, all the floors, ceilings, girders and furrings of outside walls, columns, etc., being covered with fireproof tile, while the partitions throughout the structure are built of hollow tile, giving a light but thoroughly substantial division to the interior at a vast reduction in expense as well as an economy of room. The main staircase will be of marble, and fine elevators will operate for the use of passengers and the carrying of freight. The steam-heating and ventilation is upon an improved plan; and in the hands of one of the best known steam-heating firms in the country, this important feature will be scientifically constructed. The Durham system of iron house drainage is used, the practical advantages of this system having been satisfactorily tested at the city of Pullman; and in all other sanitary points the building will have as perfect construction and appointments as the best builders this age of advanced knowledge in building economy can supply. Besides containing the general offices of Pullman's Palace Car Company, both for this country and abroad, the army headquarters will be here located and offices of firms controlling large interests. The three highest stories will probably be laid out in flats, while a portion of the ninth story will contain a restaurant for the use of occupants of the building. Owing to the fact that many of the details of the interior being not yet arranged, and as at a later date details of the building will be illustrated, a more extended description of this mammoth structure is deferred.

The Builders and Traders' Exchange.

THE satisfactory announcement was made in our last issue, that all the various trades in this city, representing every branch of the building interests, had convened at a preliminary meeting for the purpose of putting on a solid financial basis the organization of "The Builders and Traders' Exchange of Chicago." Since then other meetings have been held, and on the 16th ult., at a full attendance of leading representatives of the building trade, the organization was consummated. A charter has been secured under the corporate laws of this state, Geo. C. Prussing, H. C. Hoyt, Geo. Tappan, D. V. Purington and F. C. Schoenthaler being the incorporators.

The first organization of builders in Chicago was effected in 1880 by the master masons, and was called the Master Masons' Association. This was established with the view of forming a nucleus for an association composed of the entire building fraternity upon the plan adopted by The Builders and Traders' Exchange. But it is only now that this plan has seemed about to become a success, and it is due not only to the earnest work of the leading contractors of Chicago, but to the pressing need of such an association that the enterprise has not only begun a rapid growth, but is beyond doubt destined to be the greatest and most successful of builders' associations in the United States.

The purposes of the Exchange, briefly stated, are to promote and elevate the mechanical and industrial interests; to inculcate just and equitable principles of trade; to establish and maintain uniformity in commercial usages by rules and regulations; to acquire, preserve and disseminate valuable business information; to adjust differences and settle disputes between members, or between members and others; to acquire, own and dispose of property, both real and personal, for the benefit of the Exchange; and for other purposes conducive to the interest of its members.

The officers elected are:

President, George C. Prussing; first vice-president, J. P. Ketcham; second vice-president, E. Baggot; secretary, F. C. Schoenthaler; treasurer, Amos Grannis; directors for one year, George Tapper, Jonathan Clark, James A. Miller, H. C. Hayt, W. E. Frost; directors for two years, James John, J. B. Sullivan, W. H. Chenoweth, Charles B. Kimbell, C. C. Thompson; inspectors of election for 1885, F. E. Spooner, James H. Rice and Adam J. Weckler.

Among these gentlemen are carpenters and builders, masons, ironmen, brick manufacturers, stone-cutters, proprietors of stone-yards, limemen, lumber dealers, manufacturers of sash, doors and blinds, plumbers, gas-fitters, building contractors, etc. Every branch of building is represented, and a large membership is desired. Every nationality is represented, and the design is to make the enterprise cosmopolitan in every respect. The Exchange is to have meetings daily.

The gentlemen who originated this worthy project and have carried it through to a successful and promising consolidation, are entitled to no small praise. It is well known that most of the large cities in the country have for some time past supported organizations similar in kind, and notably in New York, Boston and New Orleans, have these grown to wealthy and influential and powerful organizations, while those of Philadelphia, Cincinnati and St. Louis are likewise flourishing. This new exchange has taken for its model the Boston plan, and the various gentlemen already identifying themselves with it are sanguine that it will become one of the most prosperous and useful establishments of its kind in this country. A permanent location for the meetings of the exchange will be fixed upon at an early day.

The large hall immediately under the permanent building material exhibit of Architect Henry Lord Gay was earnestly considered as a place of meeting, both because of its light and floor space, and because of its proximity to the exhibit. This is certainly a strong reason why it should be located there, where the builder and his work could be seen together, and this location has been strongly advocated by some, while others seem to think that a location more central would be desirble. The exhibit being in the heart of the business section, where business men could conveniently visit it, makes this position valuable, but on the other hand the high rent asked for the hall makes the exchange hesitate. Meanwhile the city in the neighborhood of the present Master Masons' Association rooms is being thoroughly canvassed for suitable quarters, but with little success. The location of the exchange, wherever it may be for the coming year, will be but a temporary one, for the certain growth in that time will demand large, convenient and permanent quarters, which will either be secured in the neighborhood of the city hall, or by members of the association forming a company and building a structure of their own. The latter project would seem the most advisable and one worthy of the representatives of the great building interests of Chicago. The exchange has 250 members, with applications coming in daily. A membership is anticipated of at least 3,000, and that, too, within a comparatively short space of time. Any individual or firm of mechanics, manufacturers, or traders of good repute, whose avocations connect them with the trades or industries of building, may become a member of the exchange upon election by the board of directors. The usefulness of the exchange is apparent to all when every interest connected with building in a great city like Chicago may be brought together daily for consultation at a central point. There need be no misgivings about its sure success.

Look Out for Fraud.

A MAN by the name of W. H. Lee has been representing himself as an agent of "Building" and taking subscriptions for the same in Chicago and vicinity. He is pronounced a fraud by Wm. T. Comstock, the publisher, and the public warned against him. J. W. Taylor, the Chicago dealer in architectural publications, reports that Lee has also been representing him without authority and pocketing the proceeds.

C. H. McCONNELL, the manager of Haverly's Theatre, is about to reconstruct the entire interior, a description of which will be made at a later date. Though the architects have not been engaged, it is probable that architects Kimball and Wisedell, of New York, will complete the changes

Building-Stone.

PAPER READ BEFORE THE CHICAGO ACADEMY OF SCIENCES, NOVEMBER 27, 1883.

BY W. L. B. JENNEY, ARCHITECT.

II.

(*Continued from page 146, Vol. II, No. 5.*)

THE question of preservation of stone has of late years attracted much attention. Many methods have been proposed and tried, but none have been all in all so satisfactory as to come into general use. Paint is effective for the short time it lasts, but disfigures any good stone, and certainly cannot be recommended. Oil fills the pores of the stone for a time, but discolors the surface.

There is a process that was applied to the building of Mr. L. Z. Leiter, occupied by Meyers, Strauss & Goodman, Monroe and Fifth Avenue. The surface is warmed by a charcoal stove, and then a hot solution of paraffine and creosote is applied with a brush. The creosote tends undoubtedly to increase the durability of the paraffine. This treatment is open to the objection of discoloring the stone.

There is a process known as the "Lundberg," which is applied by a company in this city. This material is said to be an insoluble metallic substance. There is a stone in the Chicago postoffice, treated six years ago, that today appears better than any other stone in the building.

Some method of preserving the stone in our city buildings is certainly very desirable. How many are so seriously discolored that whatever beauty they may once have possessed is lost. The Chicago customhouse and many other buildings of both limestone and sandstone have the surface scaled off over considerable areas.

While we are seeking a preservative we must not lose sight of one element of destruction, muriatic acid, which is very generally used in cleaning buildings. It is almost impracticable to prevent its use, so much does it diminish the labor.

We have hastily reviewed the different kinds of building-stone, and examined such specimens as I have been able to procure. I have by no means exhausted the subject. There is much more to be said, but probably I have said quite enough for one evening. It is easy to see that Chicago is not wanting in a variety of good building-stone of all the species and of all colors, and if the architects fail to build both substantially and beautifully they certainly cannot excuse themselves on the ground of the want of material.

If the parties making the examination of a stone can visit the quarry, they should look for outcropping and for detached stones that have been long exposed to the weather. When these can be found they will give valuable information in regard to weathering qualities, which are all in all the most important. One must be sure these detached pieces come from the part of the quarry under examination, for the different strata are often very different in quality.

Stones for building purposes are classified as granites and other igneous rocks, slates and schists, sandstone, limestone.

Granite is a primary rock: compact, crystalline and unstratified. It is composed of feldspar, quartz, and mica crystallized promiscuously together, the proportions varying greatly. Dana gives a kind of average composition: feldspar 40 per cent, quartz 30 to 40. There are many varieties of granite. Mr. Bodwell, of the Hollowell & Bodwell Granite Co., tells me that he has a collection of over sixty. The varieties are caused by the character and proportion of the ingredients, and the manner in which they are assembled.

The quartz is pure silica, a very hard glassy substance in crystals or amorphous, grey white or colorless.

The feldspar in good granite is crystalline, lustrous, and not earthy in appearance. Its grains are of different shape and size, and the color runs through a large variety of shades, from white to grey, yellow to brown, pink to red, etc.

The mica is silicate of alumina with iron manganese and magnesia in semi-transparent glistening scales, which can easily be flaked off with a knife. The color may be brown, dark grey or black.

The durability of granite depends upon the quantity of quartz, the nature of the feldspar and the disposition and quantity of the mica. If there is much quartz it will work hard, but will weather well if the feldspar is good.

Feldspar is silicate of alumina with silicates of lime, soda and potash, in groups of three or all together. The most common form of feldspar in the best granites is oligoclase or soda feldspar. The potash feldspar or orthoclase is the most liable to decay. If the mica or the feldspar contain an excess of lime, soda or iron, the granite is liable to decay.

Iron, either as the oxide, or as the white radiated pyrites (called marcasite), affects the durability of granite as well as all other stone, if in considerable quantity. It can be detected by soaking a sample in water to which one per cent of nitric acid is added, and then exposed to a dry atmosphere. It can often be seen with a good glass.

The bright yellow iron pyrites, crystallized in a cubical form, appear to do little harm. These crystals have been found in a bright, unaltered condition in Glasgow in the slate of a roof one hundred years old. Chemically, these two forms of pyrites are the same, although physically so distinct. The white radiated pyrites decay quickly. In using granite in several varieties in the same building the best effect is produced by placing those of finest grain near the eye.

I have here samples of some of the numerous granites brought to Chicago.

The Hallowell white granite is quarried at Hallowell, Me., about two miles below Augusta, on the Kennebec river. This quarry is fully developed, and is capable of furnishing twenty thousand tons of large building stone in a year. This granite is composed of quartz and feldspar with a little mica. It is fine grained and has been tested with a crushing weight of twenty-five thousand pounds per square inch. It has a rift parallel with bed. This stone is used for the new State House at Albany, N. Y., and the new Board of Trade in this city and other Chicago buildings. This granite is used for buildings and monuments.

Fox Island or Harbor granite, used in the three principal fronts of the new Board of Trade in this city. This stone is from extensive quarries on Fox Island, southeast coast of Maine. It lies in very thick sheets. It is coarse in fleck and of a medium grey color. It has a rift lengthwise of vein and perpendicular to the bed. Used exclusively for building. There is also on Fox Island a quarry of fine dark mixed grey, and one of black granite.

The Jonesboro granite is quarried at Jonesboro, Me. It is of a reddish color, coarse in fleck. Like all the red granite, the stone is difficult to quarry, it having been deposited in mass and in large boulders instead of layers, like, for example, the White Hallowell. The first story of the new Pullman office building is entirely constructed of this granite.

At St. George, N. B., is found a granite of a deep red color. It is said to be the deepest red of any known quarry. This stone is also quarried with difficulty and has neither rift nor grain. The entrance to the First National Bank building in this city is of this stone.

At Sprucehead, near Thomaston, Me., is found a granite with coarse black, white and green grains. It is easy to quarry and to work, was used in the postoffice of Atlanta, Ga. I have also samples of the Rhode Island granite, Quincy granite, red granites, etc. etc.

Gneiss. All the stones usually called granite are not true granite—some are gneiss, which has the same composition as granite, but with traces of lamination, caused by the mica and other ingredients being more or less in layers. Gneiss splits most easily in the direction of the mica layers. Others are syenite and syenitic granite. True syenite consists of quartz, feldspar, and hornblend; it differs from true granite by the substitution of hornblend for mica.

Syenitic granite is composed of crystals of quartz, feldspar, mica and hornblend. That is to say, the composition of true granite with the addition of hornblend. This is the stone found in Syene in Upper Egypt, whence the name syenite and syenitic granite for stone resembling granite and containing hornblend.

These syenites are generally of darker color than ordinary granite, caused by the grains of hornblend which is a silicate of lime and magnesia, and in the dark green and black varieties contains much iron. It is very tough and hornlike, whence the name. If the feldspar is of good quality, hornblend granite, it is exceedingly durable, and will take a fine polish.

Porphyritic granite contains large, distinct, independent crystals of feldspar, scattered at random through the mass.

Trap rocks consist of feldspar and hornblend. They are very hard and tough, and make good road metal and paving stones, but are not much used for building purposes.

Green stone is allied to trap, and although called green stone, some varieties are nearly black. The grains are not as coarse as in granite. The color is due to chromium. Green stone is found on the Hudson just above New York and in the Orange Mountains of New Jersey. These stones are durable but cannot be obtained in large blocks and are therefore only used for irregular ashlar work. The green stone in this market is called Philadelphia or Pennsylvania. It is quarried in the eastern part of that state.

Next in order is slate, an argillaceous rock, compact and fine grained. Originally a sedimentary rock, but will no longer divide along the planes of bedding, but split readily along what is called the "planes of slaty cleavage," to which is due our roofing slate—not a building stone in one sense, but it is the best roof covering yet introduced, although one of the oldest. A good slate should be both hard and tough, it should give a sharp metallic ring when struck. It should not splinter under the slater's ax, should be easily "holed", without danger of fracture, and should not be tender or friable at the edges.

One excellent quality in slate, and the one that is my excuse for mentioning slate among the building stones, is that it will not absorb moisture to any considerable extent, which makes it very valuable as a damp course, for which it is often used in Europe, more than in this country. If the top of the basement or foundation walls soon after they are clear of the ground, are covered across their entire thickness with a layer of good thick slate laid in clear Portland cement mortar, it will effectually prevent any moisture from ascending the walls. This is really more important than is usually supposed, not only for outer walls but also for basement partitions, in which, in many of our city houses, I have traced the moisture up the brickwork five or six feet, by the discoloration, and it no doubt ascended much higher.

(*To be Continued.*)

Our Illustrations.

Page 11, front elevation and plans of the new Farmer's National Bank building, at Ripley, Ohio. By architect E. Anderson, Cincinnati, Ohio. The lot being only 18 by 60 feet, and surrounded on three sides by buildings which shut out the light and air, presented unusual difficulties which have been creditably handled by the architect. The building is three stories, executed in iron for the first story, and solid Buena Vista freestone walls above, and galvanized iron cornices and acrotia, polished plate and rolled cathedral glass windows. The banking room is 16½ by 25 feet. The height of this room is fifteen feet, with the floor tiled with black and white marble; the vaults of massive iron, and safe in the center and rear. Also a perspective of the offices of the Covington & Cincinnati Suspension Bridge Co., at Covington, Ky., by the same architect.

Page 5, interior of the Oriental Masonic Hall, Chicago, decorated by H. J. Milligan. Illustration from sketches by Paul C. Lautrup. For description see page 4.

Supplement: Perspective of new Pullman's Palace Car Company's office building, by S. S. Beman, architect. For description see page 6.

Page 9. Fragments of Chicago architecture. Sketched by Cicero Hine.

Architectural and Building Notes.

CONTRACTS for the rebuilding of the De Steiger Glass Factory, in La Salle, Ill., have been made, and work commenced.

THE metal-roofers are taking steps toward improving the quality of the zinc and tin employed in roofing, and making the use of the superior metal uniform.

FOR the accommodation of the world's fair in 1887, San Francisco will put up buildings costing $1,000,000. They will be erected in Golden Gate park.

THE senate committee on public buildings and grounds ordered a favorable report on the bill providing for the erection of public building by contract with the lowest bidder.

THE Master Plumbers' Association have decided to secure the rooms on La Salle street, between Lake and Randolph, lately occupied by the Hartford Fire Insurance Company, as permanent quarters.

ARCHITECT F. B. TOWNSEND, of this city, has prepared plans for an Industrial School, to be erected for the Unity Church Society, as soon as the weather will permit. Its dimensions will be 44 by 44, two stories and basement and built of brick and stone; cost, $9,000.

ARCHITECT A. C. VARNEY, Detroit, has about completed an elegant design for a staircase for Andrew Hair, the caterer of that city, to cost $600. The wood principally used will be cherry. The design is said to be very artistic, and considerable time is required in which to do the turning and carving.

THE Master Plumbers' Association give their annual entertainment and hop on the evening of Wednesday, the 20th inst., at the Grand Army Hall, E. Washington street. The occasion will be one of social pleasure and reunion of the members and their friends, and the object to raise funds for the library and apparatus for the use of the association.

ARCHITECT H. R. WILSON has in course of construction several buildings, among which is a block of brick stores for J. K. Bigelow, 50 by 70 feet, three stories and basement, plate-glass front, situated at the corner of Lake and Page streets, to cost $20,000. Also a residence for Wm. Rogan, at 690 West Adams street, three stories and basement, to cost $15,000.

AMONG the recent contracts made by the Northwestern Terra-Cotta Company are those for the ornamentation of the Councilman Office building and Open Board of Trade. That now nearing completion, the ornamental work upon the Pullman buildings, is one of the finest specimens of the art ever produced in the West, a belt course running across the front above the first story being especially striking.

ARCHITECT J. C. COCHRANE, having been elected architect for the new courthouse at Marshalltown, Iowa, has gone to that point to consult the directors. It may be mentioned that the board of directors of the Joliet courthouse in that city have decided to build upon the old lot, and have accepted Mr. Cochrane's plans for the new building. It will cost about $123,000; will be 76 by 144 feet in dimensions, and will face on four streets.

A PLATE-GLASS insurance company, having to pay 1,456 losses in eight months to September, reports, 343 breakages from stone throwing, etc.; imperfect glazing caused 144; 86 door plates were broken by wind, and 59 by wind and hail; burglars, 76; malicious persons, 43; runaway horses, 24; persons falling on the sidewalk, 39; window cleaners, 103; moving shutters, 54; with other breakages from 59 down to 1, the last caused by a flying owl.

ARCHITECT L. G. HALBERG is constructing, on the corner of Van Buren street and Ogden avenue, a two-story and basement photo-studio, for Saunders & Deach, front of Indiana pressed brick, of unique design, with ornamental sides, to cost about $5,000; two stores and four flats on Wells street near Elm, three stories, attic and basement, to cost about $15,000; for H. H. Roundtree, Platteville, Wis., frame residence, to cost $5,000; for Dr. J. R. Cozine, at Englewood, a two-story building, attic and basement, to cost $1,835.

ARCHITECT O. L. WHEELOCK is building for himself a residence on Ellis avenue, between Oakwood avenue and Brook street. Pressed brick is the material used, with brownstone trimmings. It will be two stories and basement in height, 32 by 58 feet, with a high roof. One of the features of the interior is a diagonally-shaped parlor. A brick barn in the rear will be 36 by 29 feet and two stories. The plans of the barn are peculiar, and something out of the ordinary style of architecture for similar structures.

ARCHITECT WAESCHER is constructing two factory buildings for the Newbury estate, which will cost about $50,000 apiece. One of these is at the corner of Franklin and Illinois streets, and the other at Superior and Wells streets. They will be particularly strong and solid, and also will be well lighted. Material of brick with stone trimmings. Each are five stories high. The same architects have just completed for E. W. Blatchford, a handsome and substantial-looking building, which cost $30,000. It forms an addition to the shot-tower building on the corner of Clinton and Fulton streets.

THE Wight Fireproofing Company have just received the contract for the fireproofing of the American Bank Note Company's building, in New York. The contract calls for the covering of all columns and girders and the ceilings with porous terra-cotta, and the entire plastering, amounting to about $32,000. In Chicago this company are placing a mansard roof on the Pike building, corner State and Monroe. This will be built of porous terra-cotta bricks set between I-beams, making a form of mansard that, had it been practiced before the great fire, would have saved many buildings.

ARCHITECTS BAUER & HILL have completed extensive alterations in the panorama building. This structure, which at the time of its erection received extended description in these columns, was found to be inadequate to accommodate the unexpected crowds which have thronged it ever since its completion, to see that remarkable painting, "The Battle of Gettysburg." The building is now not only a model structure for panorama purposes, but is perhaps the finest and most commodius ever erected in this country, containing some features superior to like edifices in the old world, and is alike a credit to the architects and to the management.

J. J. LOCKWOOD has received the contract for furnishing all the pressed brick for the Western Indiana railway depot at Chicago. Philadelphia pressed brick will be used, also a large quantity of moulded and enameled brick, the latter from the Enameled Brick Company's works at Philadelphia. The contract covers about 400,000 pressed brick, and Mr. Lockwood is to be congratulated upon receiving this order, which is not entirely owing to the company's preference for Philadelphia brick, but also because of this gentleman's reputation among architects and contractors as a reputable business man, whose contracts are delivered on time, and are always up to the specified standard.

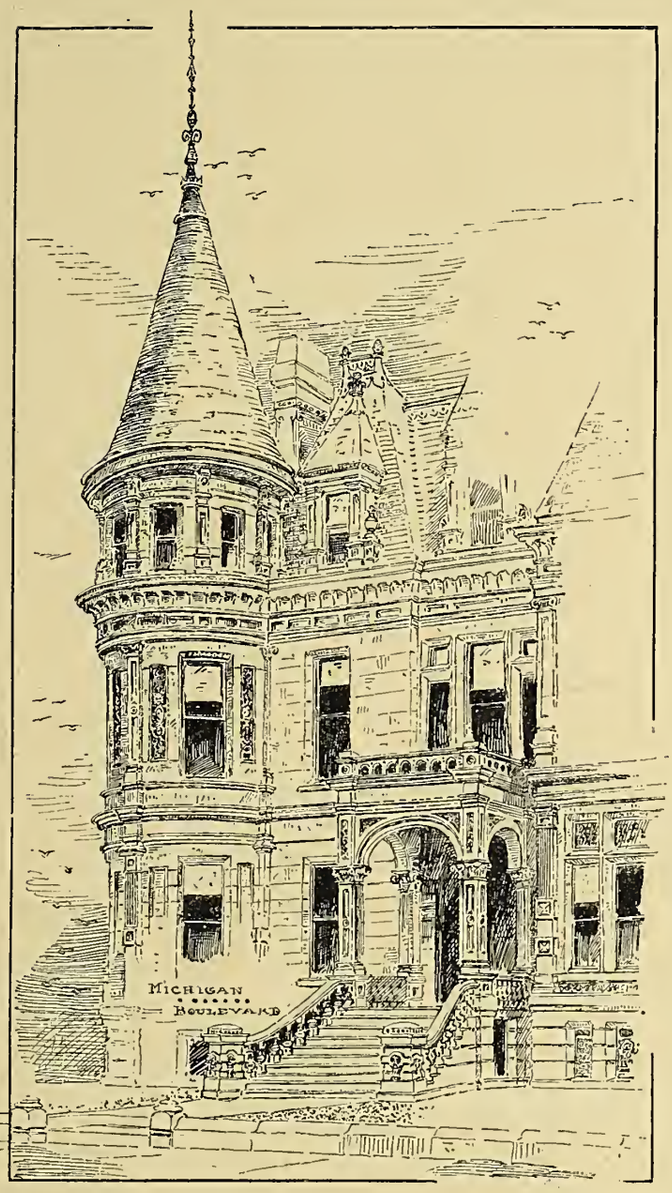
THE Pioneer Fireproof Construction Company, of Chicago, is the new name of the Ottawa Tile Company so long and favorably known in the line of furnishing fireproof material for building. Wishing to be more thoroughly identified with Chicago, where they have been practically located for many years, the old name being taken from the works of the company at Ottawa, as the new name is to express the claim of this company to the succession to the first concern to place fireproof tile in buildings as a protection against fire. In wishing the company a continued success under its new name, it is but opportune to remark that the public owe to the fireproofing construction companies more appreciation than to fire insurance, as the former make the cause impossible while the latter only deal with the effect.

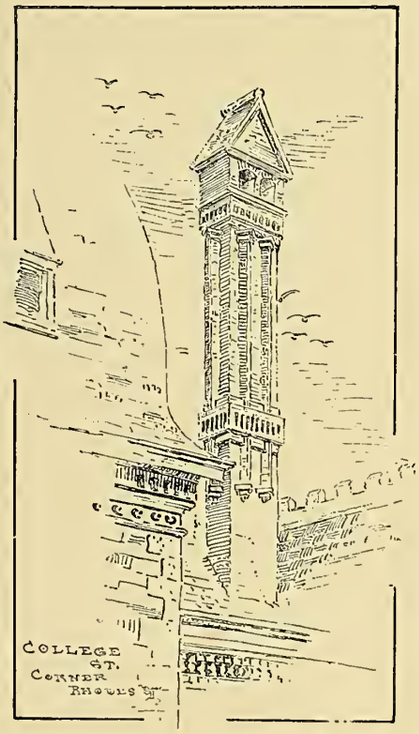
ARCHITECT C. L. STILES is just finishing the fine residence built for Mrs. Russell, at the corner of Monroe and Laflin streets. It is two stories and basement. Anderson pressed brick is used in the front and sides; trimmings cut-stone, with mansard roof, and cost $10,000. Also a fine residence at Elgin, Ill., for D. E. Wood. It is a veneered building, with high Gothic roof, two stories and basement; front built of white or cream-colored brick, and trimmed with Anderson red brick, which gives the frontage a handsome appearance. Cost $9,000. The same architect is also making plans for the completion of Grace church at the same place, by the addition of a story and a tower. Complete, the building will cost $16,000. Also three houses in Lighter's addition to La Grange, to cost $3,500 each.

ARCHITECT J. H. HUBER has in process of erection a fine residence for Mr. M. W. Diffley, at No. 42 Bellevue place, with pressed brick front and terra-cotta trimmings. Basement steps and sidewalk of New York blue stone. A special feature of the front will be the second story oval bay window of galvanized iron, with bent plate-glass and very rich and costly stained glass; interior feature is stairway, which will be of red oak, butternut and cherry; the second story is to be lighted by a large stained glass dome; the house is to cost, complete, $10,000. Mr. Huber also has plans for a three-story flat-building for Mr. T. Parker, on Honore street, to cost $6,000, also for three-story flats, with pressed brick front, terra-cotta trimmings, stained glass transoms and all modern improvements, to be erected on Rush street near Oak, for Mr. J. Moerschbaecher, to cost about $8,000. Also a residence and barn on Larrabee street, for Mr. J. Becker, to cost about $9,000, and a mission church for the German Baptists, being erected on the corner of Burling and Willow streets; the church will be dedicated the last Sunday in January; the cost is $11,000.

ARCHITECTS BURNHAM & ROOT are preparing plans for two schoolhouses, one of eight and one of sixteen rooms, at Hyde Park. They are to be built on a new theory, the idea being to have all rooms face the south, making a radical departure from the old quadrilateral building. Also plans for rebuilding the Las Vegas Hotel, lately destroyed by fire, at Las Vegas, N. M. The new structure will contain three hundred rooms. To be built of Bradford sandstone. In addition to this the Atchison, Topeka & Santa Fé R. R. Co. will build a number of cottages adjoining the hotel, to accommodate the guests who will be served from the hotel. The cottages will contain four, five and six rooms each. These architects also report two fine residences for James Franks and C. C. Thompson. That for Mr. Franks will be 46 by 80 feet, two stories, an adaptation of the Romanesque, and that for Mr. Thompson will be 35 by 80, the two stories Renaissance in style, of the earlier Georgian type. Also two picturesque suburban residences for W. E. Hale and John Davis, on Drexel Boulevard. One will be of grey stone for the first story, with red slate above. The other will be built of a very large and fine pressed-brick, from Chester, Ill.

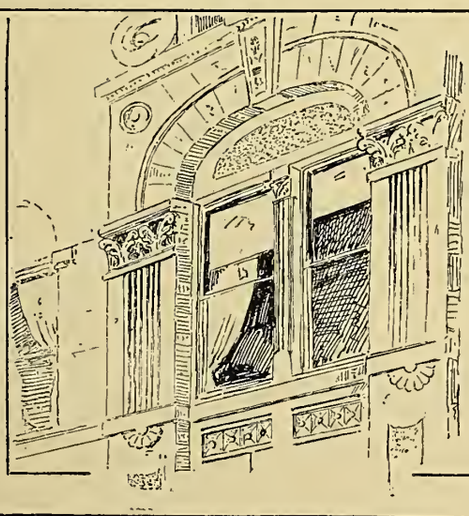
ARCHITECTS COBB & FROST have the preliminary sketches and plans of a proposed opera house to be built upon the corner of Washington and Clark streets. The opera house company have secured the lease of the ground from the Peck estate; but the lot is encumbered by a three-story brick building called the Exchange building, built after the fire by the Johnson estate upon a lease of the ground which expires May 1 next. The building will probably at that time be torn down and the work of excavation and building upon the opera house immediately commenced. The proposed structure is 182 by 107 feet; will be nine stories and basement in height, and will contain, beside an auditorium to seat twenty-five hundred people, nine stores on the first floor and about three hundred and fifty offices. It will, of course, be thoroughly fireproofed, hollow tile being used for the partitions. The basement and first story will be of rough-faced brownstone, and the stories above of dark red pressed-brick and brownstone trimmings with molded brick and terra-cotta ornamentation. The structure will cost about five hundred thousand dollars. These architects are now at work on the plans for two very handsome houses, each 30 by 60, three stories and basement, to be of pressed-brick, for Mr. O. W. Potter, president of the North Chicago Rolling Mill Company, to be erected on Forty-seventh street, near Greenwood avenue. They will be finished about September 1.

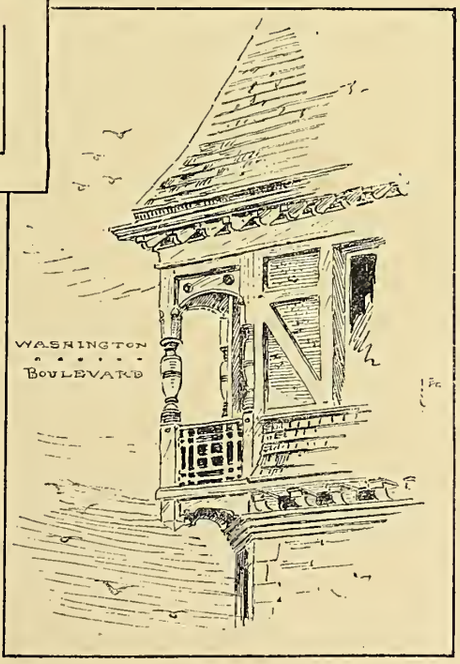




FRAGMENTS OF CHICAGO ARCHITECTURE

SKETCHED BY CICERO MINE





Lumber Notes.

THE log crop of the Eau Claire, Wisconsin, will be very close to 200,000,000 feet.

A NUMBER of northern men are visiting East Tennessee in search of timbered lands.

DURING the past year Ludington shipped 121,357,000 feet of lumber to Chicago, against a shipment of 121,603,000 feet for 1882.

IN the forest products of the United States the annual yield in raw material—such as lumber, fuel, bark, etc.,—at a low estimate reaches fully $800,000,000 in value.

THE Muskegon Car and Engine Company will have to purchase 500,000 feet of hardwood lumber, 1,000,000 feet of softwood, and 1,500 tons of iron to fill a contract for building 500 box cars for the Nickel Plate railway.

THE most encouraging reports have come from the pineries, of plenty of snow and good roads, enabling work to be prosecuted with vigor for a long season, whereby a full crop of logs will be got out in some sections before spring comes to break up the roads.

IT is said that along the Saline and Ouachita rivers and on Bayou Bartholomew, in Arkansas, is standing today, oak that will match in quality and size the best that is to be found anywhere in the United States. A diameter of from four to six feet, and a clear height to the first branch of sixty and seventy feet is not uncommon.

A SOUTHERN exchange says: "It is only a question of time, and that, too, a very short time, when the great lumbering industry of the country will be transferred to the southern states of Arkansas, Georgia, Florida, Mississippi, Louisiana, the Carolinas and Texas, and those states be rendered as prosperous by the utilization of their pine forests as have been the white pine regions of the Northwest."

FEW states in the Union have a larger area of valuable timber lands than has Tennessee. Of her 26,000,000 acres of territory, only about 9,000,000 are in cultivation, leaving 17,000,000 acres, nearly all of which is more or less covered with valuable timber. Deducting 1,000,000 acres for waste land, and this is a most generous estimate, there remains 16,000,000 acres of timber land, most of which has been but slightly, if at all, disturbed by the woodman's axe.

INDICATIONS point to the probability that a greater proportion of good logs will be put in this season than there was last. The markets are all glutted with No. 2 stock, while the better grades are relatively scarce. A prominent Menominee operator admits that his concern will discard the very poor timber this season, thus a portion of the lumber market will be comparatively free from culls, or as shakey lumber used to be called in the neighborhood of Chicago, "De Coudres."

FOR yellow pine in the South, there is certainly much to hope for in the immediate future. Stocks are nowhere very large, while the demand is certainly increasing at a rate that will in a short time absorb much larger quantities of this wood than ever before in the history of the trade. Southern pine manufacturers are not rushing things as they have heretofore done, to their own injury, and the market will not soon be overstocked as has been the case in the last two or three years. Logs are reported scarce at many of the mills, which fact will also aid in restricting the cut. The sales of yellow pine are constantly increasing in this city.

Art Notes.

GEORGE HARVEY, formerly of this city, and now in Burlington, Iowa, is painting some figures which he intends sending here to exhibit.

PAULSON, the marine artist, has his studio on a yacht which he owns, and he says his rent is very low. (Probably at water level). He intends sketching along the lake the coming spring.

THE furniture designers are busy, ever at work evolving something new for the woodturner, the woodcarver and the manufacturer. Many new designs in furniture will be ready in the course of a few days, and may be seen at the large furniture stores.

THE Art Guild is engaged in decorating its apartments, and the month will be one of preparation for the decorators' evening to be given in March, at which time the highest productions of decorative art ever exhibited in this city will be produced for public inspection.

AT Stevens' gallery there is a caricature of a fruit-piece, by Platt, that is not only clever as a take-off, but a good thing in itself. Instead of the conventional apples, pears, peaches, grapes and wine-bottle, Platt has radishes, onions, cucumbers and a flask of oil. The vegetables have been well handled.

THE principal novelty at O'Brien's is a large sunset scene "On the Susquehanna," by the late W. S. Young, whose works a few years ago gave him a world-wide reputation. The soft light, luminous shadows and fine perspective make this a marked picture. "On the English Coast," by Bromley, is one of the finest marines this artist has ever exhibited.

AT Thurber's there are several fresh pieces, one of which is "Fairy Land," a flower-piece by Gookins, with much color, a pale fairy with a parasol, and a black elf as attendant, perched on rose-stems, and other effects. "The Railway Station," by A. D. Beecher, is an excellent representation of an early and ancient arrival at a country station. The solitary occupant of the waiting-room, he has seated himself on the rude bench, with a valise on either side, adjusted his glasses, and buried himself, mentally, in a newspaper.

THERE is on exhibit in Stevens' gallery a special collection of nearly one hundred pictures, many of which are the work of Mr. Walter McEwen, who has recently returned from Europe, where he has spent the most of his time during a number of years past. The collection is very much admired. Mr. McEwen has done some superior work in pastel or chalk, especially in the line of portraiture and study heads. His collection, of his own paintings, is a very interesting one, and fully warrants the interest David Neal has taken in this young artist.

A Chicago Office Building.

THE building of large structures for office purposes is not remarkable in Chicago, but there are facts connected with the history and construction of the Calumet office building which call for special mention, because of the fact that the builders, Messrs. Mortimer, Tapper & Grannis are also the owners.

These gentlemen came to Chicago when Chicago was little more than a village, and through their exceptional skill as masons and mason contractors—trades to which they served their apprenticeship in England, they became leading builders of Chicago; erected many of the most important structures of the city; and are quoted as authority in all questions of building construction, especially those where foundations and foundation-walls are to be constructed.

In 1866, Mr. Geo. E. Mortimer and Wm. Tapper purchased a strip of ground five feet and one-half wide, fronting on Monroe street, and running back siding on La Salle street one hundred and eighty-nine feet for $2,500, and, until the great fire, they had a small office on this corner. Subsequently the owners of the adjoining property, made a proposition by which an exchange was made, Mortimer and Tapper giving all but the seventy-eight feet front upon which the building stands for forty-five and a half by seventy-eight feet in the rear, giving then a valuable lot seventy-eight feet front by fifty-one feet deep, or exchanging six hundred and ten square feet for three thousand five hundred and fifty-three square feet, the difference showing the value placed upon "front feet" at that time. The front feet were gold and the rear lot copper, and though they gave a full equivalent, Mortimer and Tapper received the larger quantity, and to them equally valuable, as it gave them a building site.

Mr. Amos Grannis, who has been no less prominent among Chicago builders, and is the owner of the Grannis block, associated himself with these gentlemen for the construction of the Calumet.

The building is an illustration of what can be done upon a small piece of ground.

The foundations were commenced almost two years ago, and slowly and steadily they were laid—sufficient time being given them to settle perfectly, which, it may be remarked, is too unusual a custom in Chicago building. These foundations are isolated pyramidal piers—a form which has been found to be the only thoroughly reliable one for Chicago.

The Romanesque style is followed in the architecture, the walls presenting a fine appearance, being composed of a beautiful dark red St. Louis hydraulic-press brick, which gives an exceedingly massive as well as rich expression to the exterior.

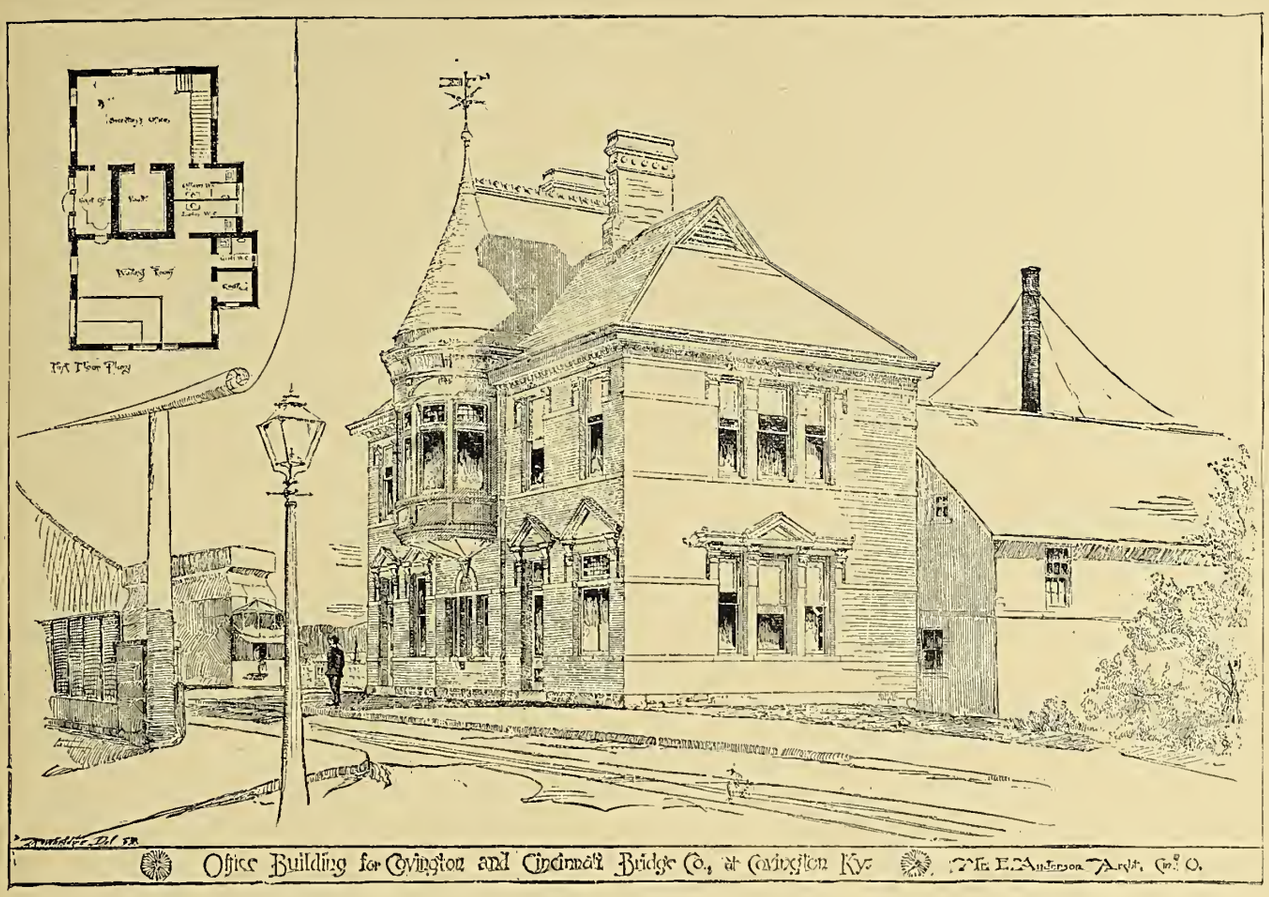
The fireproofing is most thorough and extensive throughout the building, the material being fireclay tile. All the ceilings are fireproofed with fireclay tile, and the partitions are constructed of hollow tile. An evidence of the strength of these walls is demonstrated beyond question in this building, as there is a wall eighteen feet long by one hundred and thirty feet high, built in place without extraneous support, being used to inclose all the gas and water pipes of the building. The vaults are lined with furring tile. The ceilings are applied directly to the under side of the wood joists, dispensing with all lathing and crossfurring, making an absolute fire-proof floor, at much less cost than ordinary iron beam construction. This is the first building in the world constructed by this method, and as an example of fireproofing is highly commendable to the Ottawa Tile Company, of Chicago, who executed the work.

The entrance is a novelty in the history of the finishing of office buildings. A vestibule containing the registers of the offices, which are framed in antique brass, and to harmonize with this is used—and for the first time, too—wainscoting of metallic tiling that opens a new era in the decorating of not only office buildings, but the utility of which spreads into every field where tiling can be used, and opens new vistas in the decorating perspective of the future.

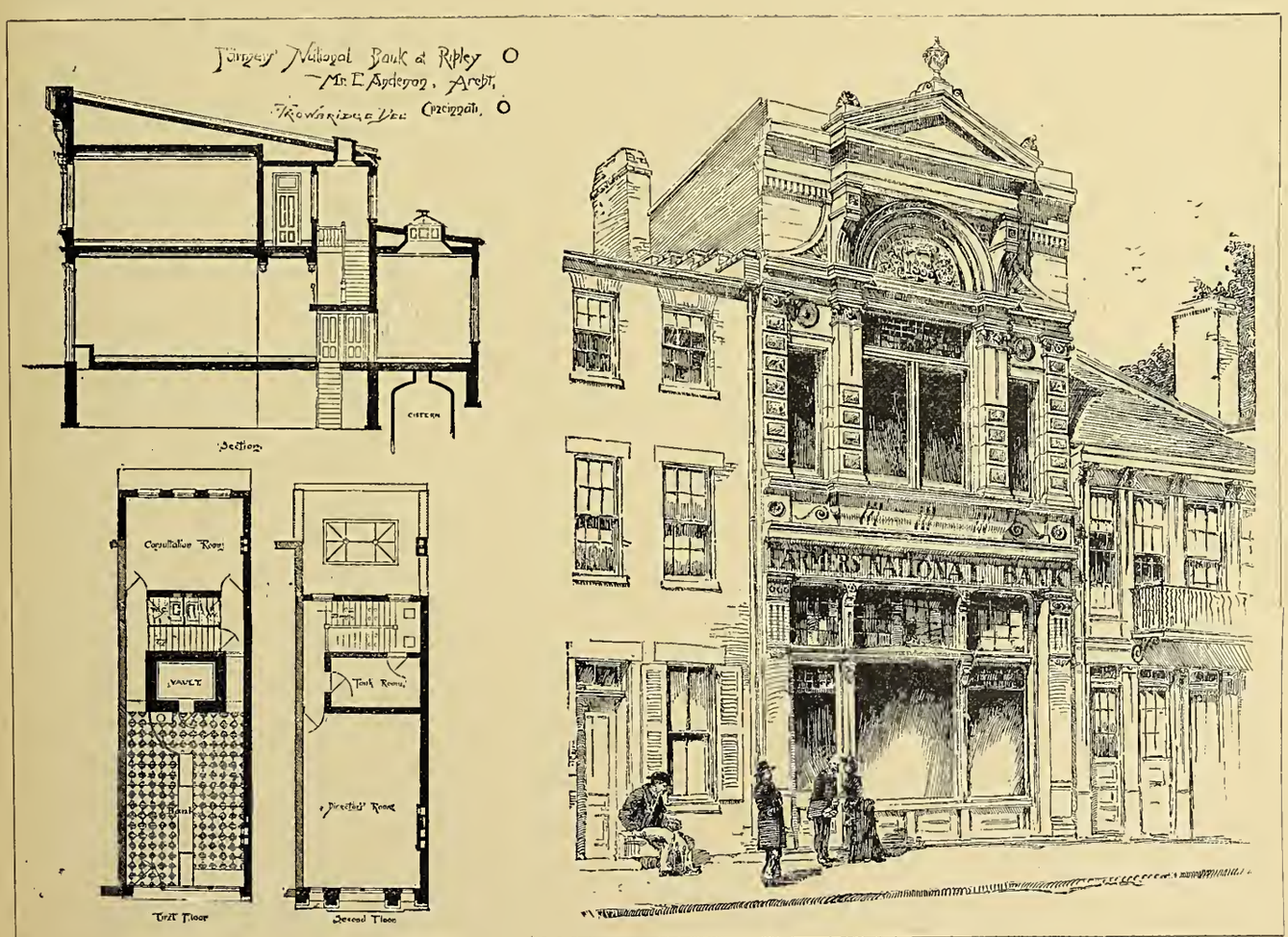
The offices, fifty-six in number, are all finished in hardwood, and a novelty in office finishing is the papering of the entire walls and ceilings throughout the building. The plumbing, gasfitting and steam-heating are each complete, and, though worthy, are too extensive for extended description, while as a whole the structure, besides being an ornament and a lasting credit to the city, is a monument to the builders and an example to the building profession, showing what enterprise, foresight and practical application can do. It not often happens that an enterprise of this extent is projected, carried through and owned by members of the building profession while they are still in the contracting business, and not retired capitalists.

The contractors for the construction were J. J. Lockwood, who furnished the St. Louis pressed brick; Tomlinson & Reid, the dimension stone; M. W. Powell & Co., six-ply cap-sheet roof; the Metallic Tile Company; the Chicago Wire and Iron Works; Foskett & Brown, the plumbing and gasfitting; John Davis & Co., steam-heating and ventilation, which contract included a Baragwanath feed-water jacket heater and the Schroll smokeless furnace; Nat Faxon, the contract for wall-paper, which is one of the largest ever placed in this city; the painting, glazing and finishing of wookwork, and lettering of the registers, by Theo Lattan, Jr.; the extensive hardware contract, including Niles' patent knobs, locks, etc., and transom-lifters, and the Zeller air-bell and enunciators for the elevator service, for which L. S. Baldwin are the agents,—a device which is fast taking the place of electric bells, especially for elevator service.

Situated as this building is, midway between the courthouse and the city hall on the north, and the new board of trade, the open board and the customhouse on the south, the location is unexcelled. The architects are Burnham & Root, and the building, with the genius and experience of these leading architects, combined with that of the owners, who are well-known builders, has made the Calumet truly a model office building.



Office Building for Covington and Cincinnati Bridge Co., at Covington Ky. — Mr. E. Anderson, Archt., Cin.ti O.



New Publications.

HINTS ON THE DRAINAGE AND SEWERAGE OF DWELLINGS. By WM. PAUL GERHARD, Civil Engineer. New York: William T. Comstock, 6 Astor Place, publisher. Price $2.50. Sent by mail free of postage.

This book, consisting of two hundred and two pages, ought to be studied by architects, plumbers, builders, civil engineers and reputable physicians everywhere, since they are the persons who have so much, in fact everything, to do with the sanitary condition of the homes of the people. We do know that very few cities have suffered more than Chicago in past years through imperfect drainage and an imperfect system of sewerage. The defects in the drainage, by which so much discomfort and sorrow have been occasioned, are by no means the least worthy of consideration. Not many men would need to examine the drainage of their homes to find serious defects, and it is no less true that many of the houses which are being erected at the present time are as sure to be cursed by sewer gas, as that they shall be inhabited. Complaints have come up from every quarter of the city at stated times that sewer gas is noticed in public buildings, in the streets, and in private houses where it has not been known before. The reason of this is sometimes due to the prevalence of strong northeast winds, which drive the water up the river, and consequently the sewers become choked. The pressure within the sewer has been so great that gas has been forced through the traps, both within houses and in the street catch-basins. There are many anxious inquiries as to some effective method of disposing of noxious gas, and it is apparent that something potent must soon be applied. To assist in this work wherever needed is the object the author had in view in publishing the book in question, and he has gone very far indeed toward a solution of many difficult problems involved in drainage and sewerage. The title "Hints" has been chosen purposely, for this little volume cannot, and does not, pretend to be an exhaustive treatise on the subject. It contains, however, a great deal of very useful and very valuable information, and an unusual collection of illustrations of plumbing appliances, all of which are explained and their merits or defects carefully pointed out. This little work ought to find a place in the library of every well regulated household. In the meantime it behooves every citizen who prizes health and happiness to look to his own house to see whether he is not harboring a dangerous enemy. Mr. Gerhard concludes his book with this paragraph: "To contribute his share in the prevention of '*preventable*' disease has been the author's aim in writing these hints. His hope is that in a near future we may find in and around every human habitation, in the city and in the country, '*pure air, pure water, and a pure soil.*

BOOK OF DESIGNS FOR SCHOOL HOUSES, AND SUGGESTIONS AS TO OBTAINING PLANS, AND HOW TO HEAT AND VENTILATE SCHOOL BUILDINGS. By G. P. RANDALL, Architect. Chicago, 1884.

Perhaps there are few architects in the West who are better qualified than the well-known author of this neatly-printed little pamphlet of ninety-six pages, to write upon the topics suggested in the above title. Mr. G. P. Randall, the author, for the past twenty-seven years has made a specialty of designing school buildings, and during that time has resided in this city. In that period he claims to have designed a great number of school buildings, more, probably, than have fallen to the lot of any other architect in this city or in the Northwest, but his business also includes a large number of designs for hotels, private dwellings, stores, banking houses, etc. This pamphlet is directed more especially to school boards and educational men, and to whom it will prove not only of interest, but of much practical value. The question of architects' fees, the general principles of Ruttan ventilation and how it works, sub-earth ventilation, hollow walls in buildings and how they should be constructed, with some fifteen designs of school houses, and thirteen designs of churches and public and private buildings, constitute the main features of the work. Mr. Randall has always been largely interested in sanitary work, and is thoroughly qualified to speak on this subject from an architectural standpoint.

SWINTON'S STORY-TELLER. A weekly of choice, complete tales, edited by Prof. WM. SWINTON. Swinton, Barnes & Swinton, 20 Lafayette Place, New York City, publishers.

Preëminently the best of "story-tellers" is this entertaining weekly visitor, which with its fresh, entertaining stories, breaks the monotony of practical life. Each number is complete in itself, containing from five to seven complete tales of the highest order of literary merit. These stories are always wholesome as well as entertaining, as it is the plan of the publishers to give each week a reproduction of the choicest tales from the pens of the world's most noted story-tellers, as well as to present the best original contributions from the most noted of European and American story-writers. Thus coming, as this neat magazine does, with the unobtrusiveness of a friend, and with a friend's entertaining powers, it fills a place in the literature field of the day that the hundreds of publications of greater or lesser pretensions shoot past, or perhaps aim at but never strike—that of complete stories by writers of acknowledged ability. The subscription price is four dollars a year.

FIRE-PROOF BUILDING MATERIALS. An Illustrated Catalogue of the Raritan Hollow and Porous Brick Co., New York.

One of the neatest illustrated little pamphlets that has come to us, and of special interest to those who intend to build fire-proof structures. The most important buildings in New York and other cities have had the hollow burnt clay flat arch brick laid in their floors, and the hollow burnt clay and porous terra cotta brick in their partitions and roofs, all of which have given satisfaction. During the past year the company have manufactured and shipped over 1,000,000 square feet of material, or, in other words, enough to cover twenty-three acres.

THE CLAY WORKER.

This is a new candidate for public favor in the special line of the clay-working interests, including brick, sewer-pipe, roofing, encaustic tile, terra cotta, pottery, etc. The first number has a substantial look, is handsomely printed, and its reading-matter is evidently prepared with care, and the subjects treated are well handled. The field its publishers have chosen is a good one, and as the interests represented are among the leading industries of the country they will doubtless sustain a paper of this kind if properly and ably conducted. The number which comes to us is sixteen pages in a handsome cover, on the title page of which are some appropriate designs, partly in color. It is published monthly, at Indianapolis, Ind., by Frank W. Patten & Co. Price $1 per year.

Mosaics.

MESSRS. ORR & LOCKETT have furnished an outfit of tools for the manual training school, valued at $1,000, which is described as one of the most complete assortments of small tools this firm have ever handled.

THE Smith & Egge Manufacturing Company is placing a large number of orders in this city for the giant metal sash, chain and fixtures, for hanging sash. They are in use in a large number of private residences and public buildings. Mr. George W. Murphy represents the company here.

THE Stewart Ceramic Co., of New York, are the sole manufacturers of Morahan's patent crockery stationary washtubs, for which the claim is made that they are the only perfect washtubs in existence. They are kept clean with little trouble, and are firmly set up, as many as desired, on galvanized iron stands with hardwood top.

WHEELER'S wood filler is unsurpassed as a finish for hardwood, and is used in the finest public and private buildings in the country, as well as by cabinetmakers and other workers in wood. Breinig's lithogen silicate paint is a product of the same makers, and is very durable and economical, one gallon equaling two gallons or more of the best mixed paint.

IT has been suggested that the St. Louis Hydraulic Pressed Brick Co. should store, say a million, brick in Chicago, so that architects can know to a certainty when they can have this excellent material; for though the company's Chicago agent is energy itself, he would not be able to supply brick on short notice should the long bridge be swept away, and besides architects would specify them with more confidence were they able to see them in stock.

THE Rotunda Furnace, designed by the manufacturer, Mr. A. M. Lesley, of New York, for warming public and private buildings, is strongly commended to public favor by those who have given it a trial. In its construction, the aim has been to secure a large heating surface, with ease in its operating and managing; also, absolute freedom from leakage of gas. Its operation is very simple and easy; ashes and clinkers are easily disposed of, and complete control over the fire is obtained by draft-slides in the doors and by a damper in the smoke pipe. One reference says, "We doubt if a better furnace can be found."

THE Tobey Furniture Company have found it necessary to increase their space for the grate, mantel and tiling department of their house. This necessity has long been felt, and they have just secured a space 50 by 100 feet, adjoining the space previously occupied by them in the basement of their building, where they will now have ample room, for a time at least, to display to the best advantage the large and elegant stock of these goods and of the latest designs which they usually carry. Patrons of the house can now make their selections of these goods to a much better advantage than ever before. No finer selection is to be seen anywhere.

THE Hallowell Granite Co. are now cutting the "drum" for the Yorktown monument. When cut it will weigh twenty-five tons. It is to be nine feet six inches in diameter, and eight feet ten inches high. It is doubtful if there is another place in the country where such stones can be quarried. The derrick to be used in erecting this monument is now being constructed in Boston. The mast, a single stick, will be 102 feet long, with a boom 98 feet. They were cut in Oregon and brought around Cape Horn, as trees suitable to make them of could not be found in any other part of the country. The monument will be surrounded by thirteen figures in bas relief, representing the original thirteen states cut in the same material as the "drum."

THE United States Encaustic Tile Works of Indianapolis, Ind., although only a little more than six years old, has become one of the best known tile companies in the United States. During the past year the company has entered largely into the manufacturing of high-art majolica tiles for mantel facings, hearths, wainscoting and ornamental purposes. The company has just completed two very large contracts, one being the Statehouse at Des Moines, Iowa, and the other the customhouse and postoffice at St. Louis, Mo. Among the many contracts now on hand might be mentioned the new government building at Topeka, Kas., two hotels in Kansas, three courthouses in Indiana, one in Illinois, a large State building at Columbus, O., containing 40,000 feet, a large six-story apartment house, also a fine residence at Cleveland, O., and ten national banks located in different parts of the country.

THOSE who were so fortunate as to attend the railway exposition in this city last year, will perhaps remember the large and varied display made by the Murphy Company Varnish Makers, one of the leading firms in their special line in this country. In order to meet the wants of the trade in the Northwest with promptness and dispatch, they have just opened an office in this city at 262 Wabash avenue. It is one of the handsomest offices on that wholesale thoroughfare; it is fitted up with good taste, with the woodwork of ash. The office, which occupies the front space in the building, is separated from the large storeroom, which extends to the rear, by an elegant stained glass partition, which is quite attractive. In the storeroom proper there are arranged fifty 500-gallon cans, which will contain a stock of the various varnishes manufactured by this company. With the facilities now at their command they can serve their customers with the utmost readiness. The office here is under the management of Mr. A. B. Garner, whose large experience peculiarly qualifies him to serve both the company and the public in the most acceptable manner.

THE Hamline University, situated midway between St. Paul and Minneapolis, is now about completed, and is said to be one of the best built structures in that section of the country. Special care has been taken

in the matter of warmth and ventilation, to make it comfortable and healthful. A very complete system of ventilation furnishes a supply of fresh air to every room in the building. The windows have all double sash, both sets weighted and sliding. The basement walls are thirty-one inches thick, with an air space, and the walls throughout are furred out. The floors are all deadened, two inches of mortar being laid in the interstice between two floors laid diagonally to each other. Particular pains has also been taken with the plumbing. The woodwork throughout the entire building is in the natural colors, and for the most part is oak. The heat is furnished from an entirely separate building several rods distant, so that there can be no possibility of a fire originating from that source. George Summers, of Minneapolis, had the contract for the building, which, when entirely finished, will cost $60,000. W. H. Hayes, also of that city, is the architect.

SOME of the handsomest work in the way of designs for interior furnishings, emanate from the well known firm of Tomlinson & Carsley who have their main office in Central Music Hall. They are designers and manufacturers, having recently built a large factory in the southern part of the city, the main building of which is 50 by 123 feet, five stories high, with which is connected an 80-foot extension, two stories high, for special manufacturing purposes. The varied and complicated machinery with which the factory is supplied, is run by power furnished by an engine of 80 horsepower. It would take a good deal of space to mention in detail the numberless articles of household furniture and interior fittings for use, ornament and decoration manufactured here. The firm make a specialty of house furnishings from special and original designs to suit the taste or fancy of the patron. The firm not only design furniture complete for rooms en suite, but all the panneling and fine fancy woodwork which goes so far to ornament the home in all conceivable ways, is supplied by them. They manufacture all kinds of carved work, from the plainest to the most beautiful and ornate; a sample of the latter, being a Japanese design carved in mahogany, a marvel of beauty and of the carver's skill, was recently furnished to the home of Mrs. Judge Caton. The business of the firm is steadily increasing, as all their work is of the most substantial kind and greatly admired for its construction and exquisite designing.

Inventive Genius in Building.

289,373. Faucet. William J. Barr and John L. Nelson, Chicago, Ill.
289,411. Electric Annunciator. Frederick Happersberger, Madison, Ind.
289,422. Brick Machine. John A. Lafler, Albion, N. Y.
289,426. Ventilator. Michael A. W. Louis, Washington, D. C.
289,435. Door-lock. V. Mumford Moore, Ravenswood, Ill.
289,458. Sash Balance. Gary B. Smith, Denver, Col.
289,459. Spokeshave. Gary B. Smith, Denver, Col.
289,666. Door-catch. Frederick J. Lee, Oswego, Kan.
289,710. Self-acting Faucet. Anton Prier, Charles Doherty and Pierce E. Everett, Kansas City, Mo.
289,744. Steam-pipe and Boiler Covering. La Fayette Aldrich, Milwaukee, Wis.
289,769. Brick Machine. William A. Graham, Carlisle, Pa.
289,832. Window-blind. Jacob B. Hartman, Wooster, O.
289,847. Water-back and Boiler-fitting for Ranges. James McGinley, Chicago, Ill.
289,885. Door-hanger. Caleb Brinton, Chicago, Ill.
289,906. Protecting Iron Water-pipes from Rust. Frederick Eaton, Los Angeles, Cal.
289,937. Basin and Water-closet Valve. Holland Smith, San Francisco, Cal.
289,948. Device for Jointing Lumber. Clarence A. Williams, Webster City, Iowa.
290,024. Lock and Latch. Henry Hersee Freeman, Milton, Ontario, Can.
290,048. Self-closing Hatchway. Charles C. Hartung, St. Louis, Mo.
290,084. Combined Register and Ventilator. William H. Maxfield, Maysville, Ind.
290,093. Door-hanger. David Nickel, Morris, Ill.
290,133. Metallic Plastering Surface. Jas. Stanley, New York, N. Y.
290,203. Sash-cord Guide. William W. Boyington, Highland Park, Ill.
290,210. Spacing-instrument for Drawing. George P. Conant, Geneva Lake, Wis.
290,226–228. Composition for the Ornamentation of Walls and Ceilings. Murray Gibson, Philadelphia, Pa.
290,247. Knob-attachment. Francis Lattimer, Richmond, Nova Scotia, Can.
290,260. Crane. Thomas R. Morgan, Sr., Alliance, O.
290,261. Brick-kiln. Lambert Niehaus, St. Louis, Mo.
290,266. Chimney-cowl and Ventilator. Joseph F. Pond, Cleveland, O.
290,277. Device for Closing Bricks in the Walls of Wells or Cisterns. William H. Small, St. Louis, Mo.
290,297. Elevator-brake. Richard W. Weymouth, Denver, Col.
290,331. Safety attachment for Elevators. Ernst C. L. Kunnecke, Dayton, O.
290,352. Portable Door-fastener. Edward Franklin Pfund, Sacramento, Cal.
290,373. Sliding Door or Shutter. Elias H. Walton, Cincinnati, O.
290,398. Friction-Hinge. Frank S. Clarkson, Baltimore, Md.
290,400. Door-securer. Wash Coe, Leavenworth, Kan.
290,457. Weather-boarding Gauge. Jacob Miller, Rockport, Ind.
290,464. Hinge. Alf N. Parnall and George A. Parnall, Denver, Col.
290,476. Grate. John R. Robertson, Selma, Ala.
290,487. Scaffold-support. Thomas J. Shaughnessy, Marshall, Mo.
290,512. Brick-kiln. Thomas B. Anderson, Allegheny, Pa.
290,521. Stay-roller for Sliding-doors. Warren M. Brinkerhoff, Auburn, N. Y.
290,568. Window-screen. Herman F. Geist, Cleveland, O.
290,573. Chimney for Furnaces. Daniel McBride, Graham, Chicago, Ill.
290,584. Illuminating Tile. Jacob Jacobs, New York, N. Y.
290,603. Sewer-trap. Louis A. Pellier, San José, Cal.
291,026. Steam-radiator. William H. Brooks, West Point, N. Y.
291,057. Skylight. Oliver C. Hubbell, Cleveland, Ohio.
291,060. Fire-escape. William F. Kientoff and Philipp Bertemes, Englewood, Ill.
291,063. Electrical Annunciator. Albert E. Leitch, Dayton, Ohio.
291,074. Refrigerating Chamber. Aaron Myers, Hamilton, Ohio
291,078. Stone-dressing Machine. Wheeler Perkins, Methuen, Mass.
291,114. Building-block. Joseph Wadleigh, Milks Grove, Ill.
291,129. Wrench. William C. Baskin, Red Elephant, Col.
291,169. Spring hinge. Walter Duncan, Chicago, Ill.
291,176. Fireproof Compound. Lawrence Felldin, San Francisco, Cal.
291,178. Plane. Willim B. Fenn, Meriden, Conn.
291,192. Support for Beams and Girders. Peter H. Jackson, San Francisco, Cal.
291,212. Lime-kiln. John T. Meredith, Milwaukee, Wis.
291,254. Window-blind. Joseph Williams, San José, Cal.
291,303. Fastener for the Meeting-rails of Sashes. George W. Curry, St. Louis, Mo.
291,342. Cross-clip for Metallic Skylights and Glazed Roofs. George Hayes, New York, N. Y.
291,347. Heater for Steam and Water. Alden Holt, Boston, Mass.
291,380. Draughting-Implement. Nevin Milloy. Cincinnati, Ohio.
291,392. Locking-Latch. Elijah Nyswonger, Hanford, Cal.
291,408. Plastering Compound. Hannah E. Scales, Newton, Mass.
291,413. Brick-Machine. Frank W. Shelley and Samuel Kiser, Anderson, Ind.
291,428. Frame for Hot Air Registers. Chas. W. Trotter, Rochester, N. Y.
291,466. Door-Check. Chas. R. Bickford, Elyria, Ohio.
291,481. Fire-Escape and Hook and Ladder Carriage. Isaac G. Morgan, Des Moines, Iowa.
291,508. Plastering Composition. Henry Graf, Sebewaing, Mich.
291,510. Apparatus for Warming the Upper Rooms of Buildings. John Samuel Heizer, Rushville, Ind.
291,586. Protector and Supporter for Fire-Escapes. Harlan Fairbanks, Boston, Mass.
291,666. Ventilator. John M. Ayer, Chicago, Ill.
291,712. Knob-Attachment. William H. Goune, Chatham, Ontario, Can.
291,734. Artificial Stone. Wm. Howell, Philadelphia, Pa.
291,737. Self-Opening and Self-Closing Hatchway. David Humphreys, Norfolk, Va.
291,824. Floor-Jack. Thomas L. Wilber, Scio, Neb.
291,836. Window-Screen. George W. Boynton, West Oakland, Cal.
291,910. Fire-Escape. John A. Johnson, Chicago, Ill.
291,919. Combined Ventilator and Chimney. William F. Matthews, Dallas, Tex.
291,926. Window-Screen. William H. Munn, Milwaukee, Wis.
291,956. Fastening for Tool Handles. Thos. Albert Sweet, Cambria, Cal.
292,017. Carpenter's Square. William R. Jones and Samuel E. Jones, Toccoa, Ga.
292,040. Weather-Strip. Ira Paddock, Greeley, Kan.
292,042. Door-Latch. Melvin Harry Palmer, St. Louis, Mo.
292,046. Disinfecting-Tank for the Disposal of Sewage. James J. Powers, Brooklyn, N. Y.
292,047. Flexible Shutter. John P. Recker, Indianapolis, Ind.
292,055. Combined Trap and Overflow for Wash-Basins, Water-Closets, Sinks, etc. Carroll L. Riker, Brooklyn, N. Y.
292,071. Seat for Public Buildings. George H. Thompson, Plattsmouth, Neb.
292,092. Guard to Hatchways. Henry J. Bleuler, Boston, Mass.
292,101. Shutter. Melvin Cottle, Scipio, Kan.
292,117. Sash-Fastener. Robert B. Hugunin, Hartford, Conn.
292,119. Process of Making White Lead. Johann Karl Kessler, Milwaukee, Wis.
292,120. Weather-Strip. Wm. R. Kizer, Hammond, Ill.
292,135. Sliding-Jaw Vise. Wm. H. Northall, Bridgeport, Conn.
292,149. Method of Constructing Buildings of Artificial Stone. Theodore W. Tyrer, Stillwater, Minn.

Synopsis of Building News.

Chicago, Ill.—The Builders' and Traders' Exchange of Chicago, was incorporated on the 30th ult., the papers being filed at Springfield; no capital; object, to promote mechanical and industrial interests; incorporators, George C. Prussing, George Tapper, D. V. Purinton, H. C. Hayt, and F. C. Schœnthaler, also the Chicago Opera House Company; capital, $600,000; incorporators, Charles Henrotin, Edward Koch, William D. Kerfoot, Philiskey E. Stanley, and Samuel C. Walker. The leading representatives of the manufacturing industries in Chicago report the outlook to be fully as good, if not somewhat better than at this period last year. There seems to be a pretty uniform faith in the recuperative powers of the country, and in a fair trade, induced by natural consumption during the current year. The general conditions are superior to those existing at this time last year. Most manufacturers in iron concede that their hope for the future lies in the revival of railroad building, and an improved condition of the iron markets. Manufacturers of metallic cornices and ornamental ironwork, and of all such iron material as enters into the construction of the better class of buildings, report the outlook encouraging. There will be a large amount of building done in this city during the current season, and much of this will be of fire-proof nature, which will call for a large amount of fire-proof material. In a large line of materials, prices are low, in many instances lower than last year. Window and plate glass are the exception; the long strike and the apparent scarcity of these commodities will continue to exercise a controlling influence in sustaining prices for some time to come.

Architects J. T. Moulton & Son, who make a specialty of building grain elevators, report there will be built at Englewood this spring, on the Lake Shore & Michigan Southern railroad track, a transfer grain house, for transfering car-loads directly from one car to another, taking weights in the transit—ten cars at once. Dimensions, 30 by 192 feet. It will be built for Maynard & Richards. The builder is not yet determined on. J. T. Moulton & Son furnish the plans. This firm will also build this season, for the Lake Superior Elevator Company, at Duluth, Minn., a grain elevator of the capacity of 1,200,000 bushels. The foundation will be pile and stone, the superstructure of wood, covered with corrugated iron; roof of tin. There will be nine receiving and eight shipping elevators, with engine and boilers of 700-horsepower. Dimensions, 82 by 312 feet, and 142 feet high. The boiler-house near by will be of brick, 32 by 62 feet, with a brick chimney 145 feet high. Also for the Union Improvement and Elevator Company, at Duluth, Minn., during the ensuing season, a grain elevator with a capacity of 750,000 bushels; foundation, pile and stone, superstructure of wood, covered with corrugated iron and tin, with roof of tin. It will have five receiving and five shipping elevators, with an engine and boilers of 400-horsepower. The elevator will be 84 by 192 feet, and 142 feet high. The engine and boiler house adjoining will be of brick, 32 by 62 feet, with a brick chimney 145 feet high.

Architect M. L. Beers reports the present condition of things good, prospects for the year promising. He has under way for D. A. Pierce and H. N. Porter a fine building, to be built on Fifty-third street, near Hyde Park avenue, Hyde Park. They will have a frontage of 80 feet and be 65 feet in depth, three stories, with cellar, in height, Anderson pressed brick front, terra-cotta trimmings, and brownstone cap sills and bond blocks. There will be four stores on the first story. The two upper stories will have sixteen flats, with four entrances to same, and balconies in rear of both stories. The store fronts will be of plate and cathedral glass. The flats are arranged for three or six rooms each, with all necessary conveniences. The stores are to be done on or before May 1.

Architects Pierce & Speyer report ten houses on Thirty-seventh street and Vincennes avenue, which will be three stories high and basement, built of Anderson pressed brick, trimmed with ornamental brick and terra-cotta. The fronts will be made attractive with plate-glass windows, etc.

U. P. Smith's row of ten residences, corner of Thirty-second street and Cottage Grove avenue, under the designs furnished by Architects Wheelock & Clay, who supervise the construction, are in process of building. Anderson pressed brick is used.

Architect Julien Zittell is supervising a two-story building for Mr. Gestlen at 279 and 281 La Salle avenue. Anderson pressed brick is used.

Architects Furst & Rudolph have let contract for a residence for Mr. Macwoef, at corner of Wabash avenue and Thirty-third street, on which the Anderson pressed brick will be used.

Architects J. W. Cassell & Co. have let contracts to James M. Clark for two residences for S. M. Hall and Mrs. Preston, on Adams street, between Western avenue and Oakley street. They will be built with Anderson pressed brick.

Architect Fred. W. Wolf is building a brewery for Mr. Jung, on South Halsted and Thirty-seventh streets, of brick, 34 by 80 feet, to cost $15,000. He has also commenced a brewery on Larrabee street, for Ernst Bros., to cost $20,000; also four houses, of two flats each, on Hoyne street and Lexington avenue, to cost $20,000. Plans are also completed for a new factory on West Lake street, near Jefferson, 75 by 140 feet, for the L. Wolf Manufacturing Company; also preparing plans for brewing-house and machine-houses at Indianapolis, Ind., for C. F. Schmidt, to cost $35,000; also a brewery at Cleveland, Ohio, for Isaac Leisy, to cost $30,000.

Architect P. W. Buehl has in course of construction the following buildings: A four-story front on West Twelfth street, for Henry Beahrendt, to cost $18,000; a three-story stone building on Blue Island avenue, for J. Dumond, to cost $8,000; a three-story building for Huber & Martin, to cost $7,500; a four-story furniture factory for F. Winther, to cost $15,000; a three-story flat-building for A. Kastler, to cost $5,500; and a three-story and attic stone building on West Twelfth street, for Peter Jene, to cost $8,000.

Cincinnati, Ohio.—Architect A. C. Nash: Church of the Presentation, on Walnut Hills, to be built of river limestone, 54 by 143 feet, with a seating capacity for one thousand people. Plans are also being made for the erection of a new church building on the site of the Christian church, on Kemper lane, Walnut Hills, and the plan will be adopted on or about March 1. The Church of the Advent is also having plans prepared for additions to the church on Kempler lane, near Cemetery street.

Columbus, Ohio.—Architect Maetzel has prepared for Hoster & Sons the plans for a handsome business block on the west side of High street, between Broad and Gay streets. Work on the new structure will commence in the early spring.—The civil engineer of the Baltimore & Ohio Railway Company is engaged in surveying the tract which that company has purchased for its new shops, and getting things in readiness for beginning active work.

Des Moines, Ia.—Architects are busy on new work, and the prospects are good for an early and active season.

Architects B. J. Bartlett & Son: For R. T. C. Wood, dwelling-house, eight rooms, frame, to cost $3,500. Cumberland Presbyterian Church, Sedalia, Mo.; brick, trimmed with stone and Anderson ornamental brick; 80 by 90 feet; to cost $15,000; now receiving estimates. For Richard Snell, of Des Moines, hotel at Fort Dodge, Ia., three stories,

to contain six stores and fifty rooms, 120 by 140 feet, brick walls, faced with Anderson brick, to cost $40,000; plans now making.

Architect Sidney Smith, of the same city, reports prospects for spring work very good, particularly for residences; work will probably be delayed considerably on account of scarcity of brick to commence with: For Dr. E. S. Mercer, brick and stone dwelling, three stories and basement, iron roof, 55 by 73 feet, to cost $30,000; contract not let at present. For Augustus Pratt, stone building, brick with terra-cotta trimmings, three stories and basement, 22 by 125 feet, to cost $9,000; under way. For Edwin Davis, brick tenement block, two-stories, tin roof, 44 by 66 feet, to cost $10,000. For E. S. Dandy, brick and stone residence, two stories and basement, iron roof, 53 by 62 feet, to cost $20,000. For E. D. French, brick and stone residence, three stories and basement, iron roof, 40 by 56 feet, to cost $10,000.

Bricklayers and brickmasons (front), $4.50; carpenters and cabinetmakers, $2.50; finishers, $3; laborers, $2: painters and glaziers, $2 to $5; plasterers, $4.50; plumbers, $3 to $5; stonecutters, $3 to $4; stair-builders, $2.50 to $3.

Detroit, Mich.—Outlook very favorable. The following is a list of buildings, most of which will be started in March or April.

Architect A. C. Varney: For Louis Lambert, brick and stone block, three stories, corner Bates and Farmer streets, 60 by 100 feet, to cost $25,000. For Wm. A. Butler, same as above, corner Woodward avenue and Elizabeth streets, 43 by 100 feet, to cost $16,000. For S. R. Callaway, manager Grand Trunk railroad, three-story residence, stone front, on Peterboro street, to cost $9,000. For H. E. Emmons, two-story residence, brick, slate roof, on Warren avenue, 30 by 60 feet, to cost $4,000. For Hibbard Baker, alterations, residence on Jefferson avenue, to cost $4,000. For Wm. B. Wesson, a three-story brick factory for Detroit Elbow Works, Bienbien street, 80 by 95 feet, $9,000; John Brennan, mason, and McEnhill & Moore, carpenters. For Wm. Rowe, two-story brick residence, corner Park and Columbia streets. For John A. Waterfall & Son, three-story brick residence, brick residence corner Cass avenue, 30 by 70 feet, to cost $5,000. For Milton Henwood, alterations brick residence, Fourth avenue, corner Selden streets, $2,500. For A. C. Varney & Bro., four two-story brick dwellings, Caroline street, to cost $5,000; A. Skinner, mason, and J. J. Gorden, carpenter. Engine house and firemen's hall, two-story brick, in Oxford, Mich., to cost $7,000; also for Henry Vinton, two brick stores, to cost $4,000; also for E. R. Clark a brick store to cost $3,000. For E. H. Hong, two-story frame residence in Newton, Kan., to cost $7,000. For George Bardeen, two-story frame building at Kalamazoo, Mich., to cost $6,000.

The St. Mary's congregation have decided to build a $60,000 edifice on Woodward avenue. The plan of the church has been adopted. The structure will be of Roman style, and when completed will no doubt satisfy all.

Dubuque, Ia.—Building outlook is good, although but little work is in the hands of the architects. The indications are that prices will range lower than during 1883.

Architect F. D. Hyde: For Hyde Clark, one-story frame building, for roller-skating rink, open timber roof, 50 by 114, to cost $2,000; under way; James Howil, builder. For Bishop Hennesy, block of three two-story brick residences, 64 by 48 feet, to cost $7,000. For St. Joseph's College, four-story wing to main building, brick, mansard roof, 40 by 70 feet, to cost $15,000; and for W. H. Peabody, two frame residences, two stories, each 22 by 46 feet, to cost $3,500.

Architect F. Herr: For Sisters of Mount St. Joseph Academy, four-stories, 53 by 100 feet, to cost $20,000. For Sisters of St. Francis, a chapel, 46 by 75 feet, to cost $10,000. For Mr. J. Simons, a block of stores, three stories, 75 by 100 feet, to cost $10,000; also a block of stores for Deichman & Hoffman, at Le Mars, Ia., 75 by 100 feet, to cost $2,000; also at Prairie du Chien, Wis., College of the Sacred Heart, 96 by 135 feet, four stories, to cost $45,000. All the above to be finished this year.

Frankfort, Ind.—The prospects at this time are fair for a good season.

Architect J. W. Hammond: For Richard Neptune, Thornton, Ind., two-story brick building, 40 by 51 feet, to cost $6,000; receiving bids. For Taylor Harshman, Jefferson, Ind., two-story frame, 28 by 35 feet, to cost $2,000; receiving bids. For Harrison Derrick, Frankfort, Ind., two-story brick, 38 by 50, to cost $5,000; preparing plans. For Coulter Giden & Co., Frankfort, Ind., three-story storeroom, pressed brick and stone front, 22 by 132 feet, to cost $6,000; preparing plans. For Fred Tice, three-story storeroom, pressed brick and stone front, 21 by 132 feet, to cost $5,000.

Grand Rapids, Mich.—The outlook for building the coming season looks fair, on the whole promising; but it is a little too early to tell, specifically, much about it.

Architect D. S. Hopkins: Grace Church rectory, two-story wood dwelling, 44 by 29 feet, cost $3,000, under way; builders, Bennet & Osburn. The following are all two-story frame dwelling houses, under way; builders, Whitmer & Foster: For George Seymore, 38 by 24 feet; cost $2,500. For Henry Ward Beecher, 38 by 24 feet; cost, $2,500. For John Jewett, 42 by 24 feet; cost, $3,000. For A. Doak, 42 by 38 feet; cost, $3,000. For Henry Bliven, 38 by 24 feet; cost, $2,500. For D. S. Hopkins, 49 by 30 feet; cost, $3,500. For D. C. Underwood, 49 by 30 feet; cost $4,000. Andrew Verburg, 48 by 49 feet; cost, $3,000; projected. For Charles Sligh, two-story wooden dwelling, 40 by 28 feet; under way; cost, $2,500; builder, D. H. Mosher.

Hastings, Neb.—Present condition fair, although a little too soon to tell positive. Architect C. C. Rittenhouse: Grand Island school, at Grand Island, two stories, eight rooms, brick with stone basement, 84 by 80 feet, under contract; to cost $20,000; material used, St. Louis pressed brick and stone basement. For H. A. Koenig, Citizens National Bank and office building, 66 by 70 feet, under contract; to cost $23,500; Chas. Guenther, builder. Doniphan school, at Doniphan, two story frame, four rooms, 38 by 42 feet, $2,500. For S. N. Wolbach & H. C. Held, two-story store and office building, brick with stone basement, 47 by 100 feet, to cost $11,000; projected. Nebraska Loan & Trust Co. office building, three-story and basement, pressed-brick and stone basement, 66 by 120 feet; to cost $27,000; under contract; builders, Mc El Hinney & Johnson and Scales & Clark. For the college board, two-story building, seven rooms, brick, with stone basement, 60 by 70 feet; to cost $12,500; under contract; builders, Mc El Hinney & Johnson and Geo. E. Cisney. For James M. Ragan, frame residence, two-stories, 28 by 48 feet, to cost $3,800. For J. W. Small, ditto, two stories, 32 by 50 feet; to cost $4,200. For Stock Co., brick with stone basement hotel, three stories, 100 by 125 feet; to cost $35,000. For Wm. Brach, ditto, 26 by 58 feet; to cost $2,200. For C. H. Dictrich, two-story and basement office, stone and pressed brick, 44 by 90 feet; to cost $14,000; nearly complete. For P. P. Webster, two-story frame residence, 28 by 40 feet; to cost $2,350.

Indianapolis, Ind.—Prospects not very flattering at present. People here are always late in starting but for desirable rental property there is a good demand.

Architect C. A. Wallingford: Berkshire Life Insurance Co., two-story frame, 30 by 60 feet, to cost $5,000; contracted for; Jungclaus & Schumacher, builders. For E. Coffin, Bismarck, Dak., two-story frame, 40 by 60 feet, $6,000; projected. For J. S. Catherwood, Hoopeston, Ill., two-story frame, 40 by 60 feet, to cost $3,000; projected.

Kansas City, Mo.—It is too early to state with any certainty as to the building outlook further than that there is much talk.

Architect A. Van Brunt: For J. C. Horton, brick dwelling, cost $11,000; just finished. For F. J. Baird, ditto, cost $11,000; nearly finished. For A. A. Whipple, ditto, cost $10,000; just finished; builder, J. Andrews. For W. M. Smith, ditto, cost $6,800; nearly finished; builder, W. B. Everhart. For C. E. Holbrook, brick and frame dwelling, cost $6,500; nearly finished. For T. C. Cole, brick and frame dwelling (remodeling); to cost $4,800. For Judge Wm. Holmes, addition of fourth story to structure, to cost $3,800. First Presbyterian Church, brick edifice, basement Sunday-school, 58½ by 92 feet, to cost $30,000. Plans are complete for these last three, but contracts not yet let. First Congregational Church, stone edifice, Sunday-school on first floor, 84 by 147 feet; enclosed and Sunday-school complete. For J. Murray, brick and frame residence, to cost $4,000; plans finished.

Architect S. E. Chamberlain: The present condition is merely nominal, but the outlook is good. For Geo. Schaffer, five stories, brick, cut-stone front with gravel roof, 62 by 112.6 feet, partly under way, to cost $40,000; A. C. Hopkins, builder; contractors of other branches not yet let. For C. N. Munson, three-story frame, shingle roof, 30 by 40 feet, to cost $3,500.

Louisville, Ky.—Prospects fair, with some building under way. Too early yet to give many points.

Architect H. Molters: For J. C. Walton, office-building, frame one and a half-story, 18 by 40 feet; to cost $1,600. Also the following at other points: New Orleans, La., a three-story brick and iron structure for club rooms, 40 by 96 feet, to cost $25,000; under way; Reusch & Co., builders. Cotton Exchange, Memphis, Tenn., four-stories, brick, pressed brick exterior, stone and terra cotta trimmings, slate roof, 72 by 146 feet; to cost $99,340; Pearce & Morgan, Indianapolis, builders. For James Buckner, at Pass Christian, Miss., seaside cottage, frame, with verandahs and slate roof, 113 by 60 feet; to cost $19,000. For New Orleans Elevated Railroad Co., New Orleans, passenger depot and train sheds, pressed brick, terra cotta and stone trimmings, slate roof, three stories high, with a frame office building, one-and-one-half story, 18 by 40 feet; to cost $1,600.

Milwaukee, Wis.—Architects report that the outlook for new buildings this year is most encouraging. Already a large number of plans for buildings, principally residences to be erected, are being prepared, and the architects' offices are daily visited by people who contemplate building, to obtain figures, etc. The Merchants' Association has taken steps toward securing the erection of a hotel on the east side. The scheme calls for a building to cost about $1,000,000.—The new central station to be built is designed to be a model, and will include a courtroom. The Normal school will be erected on the $12,000 lot purchased on the west side by the city for that purpose. It will be a very handsome structure.

Moberly, Mo.—Prospect very good, but brick is scarce. Brickmakers who can carry a stock through the winter have been out of stock for two months. Good shipping point and the brick made are good, which is the cause of the demand.

Architect Edwin Cook: For Thomas O'Neal, two-story brick storeroom, 26 by 80 feet, to cost $3,000. For George Ritchie, two-story frame dwelling, 18 by 30 feet, with an L 16 feet, to cost $2,000. Plans for both structures under way.

Muncie, Ind.—The county commissioners, at a special meeting a few days ago, decided to build a $200,000 courthouse on the site of the old one. Work will begin in the spring.

Muskegon, Mich.—Architect D. S. Hopkins, Grand Rapids, sends us the following list of buildings he will supervise: For E. W. Merrill, three-story brick block, 44 by 131 feet, cost $15,000; projected. County offices, one-story brick, fire-proof, to cost $9,000. Ward School House, three-story brick (8 rooms), to cost $13,000; projected. In the way of general building notes the same architect also sends the following as a list of two-story frame dwellings under way at various paints: For F. G. Kinwan, Blent, Dak., 49 by 30 feet, cost $3,500. For R. Furniss, Niagara Falls, Ont., 42 by 38 feet, cost $3,000; under way. For T. Streeter, Tunkhannock, Pa., 48 by 29 feet, cost $3,500; under way. For C. J. Hazard, Hightstown, N.J., 42 by 38 feet, cost $3,000; under way. For C. N. Hurlburt, Elk Rapids, Mich., 42 by 24 feet, cost $2,500; projected.

Norfolk, Va.—Prospects fair, and considerable building will be done during the coming season.

Architect Frank B. Smith: Brick residence, stone trimmings, 30 by 90 feet, three stories; to cost $12,500. For R. C. Taylor, two dwellings, 35 by 51 feet, four stories; to cost $10,000. For W. H. Talbot, restaurant and club rooms, three stories; to cost $5,000. For E. Black, dwelling, 25 by 36 feet, four stories; to cost $4,000. For D. Lowenberg, twelve two-story brick dwellings, and six stores; intended to cost $20,000. Three dwellings on York street, four stories, pressed brick, with stone and terra-cotta trimmings, to cost $13,000; also machine-shop and foundry, to cost $4,000.

Omaha, Neb.—With the exception of some small cottages for workingmen, there is very little building under way at the present time. Prospects only fair; much talk but little activity.

Architect A. I. Large, Jr.: For Yost & Ney, Omaha, Republican publishers, four-stories and basement, walls of brick, roof asphaltum, 33 by 130 feet, cost $26,000. Basement now in, work to resume in spring. Several plans projected, but not far enough developed to make public.

Topeka, Kas.—Architect H. M. Hadley: For A. W. Tinkham, a brick residence, to cost $5,000. For E. P. Baker, frame residence, to cost $4,500. For T. E. Bowman, frame residence, to cost $2,200. For Ansel Gridley, a three-story double store building, to cost $6,000. For Dr. O. B. Moss, a two-story, frame, double tenement, to cost $5,000; plan just completed. For J. G. Eddy and H. J. Davenport, of Burlington, Vermont, block of seven tenement houses, two story and basement, basement to be cut stone and the stories above brick, to cost $21,000; plans completed and contracts awarded; will be built as soon as spring opens. At Columbus, Kansas, a large schoolhouse, costing $13,000; also for A. F. Hunt, plans for a two-story double store, to be built of brick and stone, to cost $10,000; also for Mr. Hunt, a plant for a $20,000 hotel; contract not yet let; also preparing plans for same party for a brick residence at Columbus, to cost $5,600; also plant for an Episcopal church in North Topeka, just completed, at a cost of $3,000; also making plant for a college-building to be built at Saline, Kansas.

St. Louis, Mo.—The Mechanics' Exchange Building Company will soon be incorporated, and, it is said, will proceed to build one of the finest structures in that city. The exchange is strong, both in membership and financially. The limits established for its location are between Sixth and Ninth streets, and Market street and Washington avenue. Several sites in this territory have been offered and will be considered as soon as the company is formed.—President Mulcahey, of the Mechanics' Exchange, has taken the contract for the erection of a large addition to the Central Female College, at Lexington, Mo., to cost $25,000.—The Third Baptist Church congregation will begin in the spring to erect their new church on Grand avenue, next to the St. Vincent's Seminary, on the south side. The church will be built of stone, and cost about $75,000.—An eastern capitalist is to build the new quarters for the Guernsey Furniture Company. The front of the establishment, as shown in designs made by Miller & Pitcher, will be more gorgeous and flashy than any other store or house front in the city.—The work on the Exposition building is progressing as rapidly as possible.—A number of English capitalists are to erect a building to cover the entire block on the east side of Twelfth street, between Olive and Locust streets, estimated to cost $2,500,000. The report says that Mr. James Stewart, the architect, has just completed the plans for the new structure. It will be built of granite. The style is Byzantine, with an elegant façade and trimmings. It will be five stories high, including a basement, which will be almost on the level of the street. It is said that the Bank of England will have an interest in the building, a portion of which will be used for banking purposes and foreign exchanges. The block will extend back to the alley, and, next to the customhouse, will be the finest and most costly piece of architecture in the city.—The proposed big apartment hotel, to accommodate 3,000 guests, is to be erected on Grand avenue. The building will be 654 feet front by 245 feet in depth, seven stories in height, and absolutely fire-proof. Iron and stone will be used throughout in place of wood, so that fire cannot extend from one room to another, and patent automatic closings will be placed in the elevator shaft at each floor. The site of the hotel is 110 feet above the level of the river, affording an extensive view of the city and the country for many miles around.—Architect Chas. K. Ramsey reports the outlook good for spring work. A large amount was held in abeyance for a time on account of cold weather, but is now being pushed forward rapidly. For T. P. Riddle, a twelve-room dwelling house, brick wall, terra-cotta trimming, slate roof 31 by 68 feet, to cost $11,000; under way. For John C. Vogel, alteration of an old dwelling to stores and offices, three stories high, brick walls, 42 by 61 feet, to cost $8,000; under way; Wm. Damon, builder.

St. Paul, Minn.—Buildings aggregating an anticipated expenditure of $1,500,000 are projected this season, including the Hotel Ryan, the Chamber of Commerce, the National German American bank, and the government building, besides a splendid business block, designed by architect George Wirth, for Hon. E. F. Drake, and to be erected on Fourth street, immediately west of the Drake block. The building is to be six stories above the basement, reaching a height of 96 feet above the sidewalk, the respective stories being basement, 10 feet; first story 18 feet; second and third stories, 13 feet each, and the remaining stories 12 feet each. The basement is to be fitted for store purposes. The building is to be so divided as to accommodate two wholesale houses. There will be two large skylights, and by an invention of E. F. Drake, the openings at every floor will close automatically in case of fire. The front of the edifice will present several novel features. In the second story, the pipestone will be used to alternate in layers with pressed brick, and the columns between all the windows will be of polished jaspar, from the Sioux Falls quarries. The end piers and range work over the front will be of jaspar, rusticated with heavy carved corbels. The upper stories will be faced with pressed brick and terra cotta; and the cornice will be of brick and stone.

T. L. JOHNSON, the gentlemanly representative of Keuffel & Esser, of New York, has just completed a semi-annual tour of the West, where he has visited not only the dealers in engineering and architectural instruments, but made many friends for his house among the engineers, who are always glad to see the representative of this most popular firm.

THE commencement of the construction of the Armour & Kent building at an early day, seems to be an established fact. While the architects say that estimates are being prepared, and the lot has been ordered cleared, and this only has been done, the firm have placed matters in such a position that the beginning of excavation may be looked for as soon as the weather will allow.

BERRY BROTHERS, the popular varnish house of Detroit, are sending out very attractive paper-weights for desk use, in the shape of metal kegs of varnish, accompanied by hardwood inlaid disks, finished with the excellent hard oil finish, manufactured by this firm. With the paper weight stamped "Berry Brothers' Celebrated Varnishes," and the handsome sample of their wood finish, this firm are well represented.

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THE

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WE are glad to receive the information, and from an authoritative source, that the recently appointed supervising architect is at the outset trying to bring to the office the practical business ability, as well as architectural skill, of which it has so much need, and of which there has been such an apparent absence in the past; and the result is that contractors are once more willing to figure on government work, feeling that the supervising architect is both practical and honest, and that their bids will receive the attention they warrant. It is no small compliment to the profession in the West that one of their number has not only received the appointment, but is acceptably filling so important an office.

THE question of high buildings is being agitated with a view of their limitation. The reasons given why their height should be limited are that they are dangerous to life and because they tend toward shading the neighboring buildings so effectually as to make them dark, damp and undesirable. While the demand for extremely high office-buildings is of recent birth and of limited growth, the inclination is sufficiently apparent to alarm those who have the future welfare of the people in mind, and in Chicago the agitation has taken the shape of an ordinance calling for their restriction, being introduced by a prominent alderman, supported by the Citizens' Association. Although the "fire" aspect of the case is that which most attracts the attention of this committee in their report, we are inclined to give the greater consideration to the feature of "too much shade," as Chicago is rich in architects who can plan, builders who are thoroughly competent to construct, and fireproof materials and devices that are incomparable for the thorough fireproofing of any structure that may be projected. It would be well, perhaps, to frame an ordinance preventing the erection of combustible buildings, but partitions can be made of tile, ceilings and roofs covered with it, stairways protected by a combination of plaster and iron cheaply and perfectly; and those who build for permanency, whether a building be four stories or fourteen, should build in this way as a matter of stability, which is economy. But the question has a serious side, and one that does not come before the architect to decide, except as he is ambitious for the future of his city, or perhaps as he sees it is liable to affect the pockets of capitalists in the future and so give him less work to do than otherwise. It does affect the property owners. "Who runs may read," that two years ago a seven-story building was thought immensely high in Chicago till an eight-story block was built, and when a year ago the nine-story Montauk block was built it was thought the limit was reached. Then the Pullman building, with its ten stories, was built, and now others of greater height are projected. The effect will be, as it is already becoming felt in the East, that the upper floors, either in residence flats or office structures, are the more desirable; and as stories are added to the top, rents will decrease at the bottom, because the surrounding buildings will shut out the direct or the reflected light of the sky. But this consideration is apparently one of the future, as it will be many years before the demand for high buildings in Chicago will be such as to make them so numerous as to be objectionable. Meanwhile let the citizens' committee and the city authorities see that high buildings are constructed thoroughly fireproof, and not, at the present stage of building operations, seek to limit the enterprise of capitalists and check our city's growth.

IN Europe, the progress of electric lighting is making far more rapid headway than in this country. In the larger and principal cities, all the public buildings, theatres and opera houses are thus lighted, and a notable fact is that all wires for conveying electric currents are placed underground. Wires in the air, as they are seen everywhere in this country, and especially in our cities, where in many places they are so numerous as to almost shut out the sunlight and resemble a huge rat-trap suspended, are not tolerated in any cities on the continent; they are all placed underground. One or two cities, like Antwerp and Brussels, have allowed a few wires in the air as an experiment, and also Amsterdam and Venice,

where the soil is peculiarly damp and bad. A correspondent of the New York *Tribune* says: "Generally speaking, a European architect, who usually has charge of a building as long as it stands, hates the sight of a wire on a roof, and prevents it if he can. The architect thus in charge of the Louvre refused to allow an experimental wire to cross that half-mile of splendor, even to oblige the Government of the Republic." The architect was right. It is a pity architects in this country are not granted the same authority.

A RECENT decision of the Supreme Court of Nebraska is of special interest to builders. S. sued B. for $492.60, the balance due him for building a two-story brick house, and B. made a counter-claim for defective material thrown out and money expended in repairing the unskillful work of S. The contract price was $2,535, and the plaintiff paid $2,042.40; the counter-claim was $1,985, for which the defendant got judgment. The defense to the counter-claim was a most novel one, viz: that the defendant had "no experience in laying foundations, as the defendants knew." The case, Sherman *vs.* Bates, was carried to the Supreme Court, where the judgment was affirmed. Judge Maxwell, in the opinion, said: "A party entering into a contract to construct a building thereby agrees that all parts of the structure shall be put up according to the agreement. As a defense to inferior workmanship he cannot say: 'I am not a mason, or carpenter, or tinsmith; therefore I am not liable for defects caused by unskillful or careless workmen.' The question is not one of skill on the part of the contractor, but of compliance with the contract." If a contractor agrees to erect a building in a certain manner, he must comply with the agreement, and no plea of a lack of skill, of himself or any of his workmen or sub-contractors, will constitute a defense for a failure to comply with the contract.

A SINGLE line told the whole story. It read: "The fire originated from a defective flue." It was truly a magnificent residence; elegantly and expensively furnished; costly paintings adorned its handsome walls, while works of art and a costly collection of bric-a-brac were to be seen in nearly every room; the library was large and replete with choice standard works, which it had taken years to accumulate; in fact, everything afforded the most ample evidence that this home was the abode of refinement, contentment and wealth. It occupied a commanding site in one of the most prosperous and flourishing cities in the West, and excited the envy and admiration of everyone who passed it. Its architectural beauty and finish was a matter of note far and wide. Its possessor could not be otherwise than happy in the acquisition of such a home, the reward of many long years of patient, frugal industry. This is one picture, and its existence was a reality only a few weeks ago. Today all that is left of it is a blackened heap of ruins to mark the spot where it once stood. At an early morning hour the defective flue got in its fiendish work and wiped the whole structure, with all its precious contents of comfort, art and luxury, out of existence. A few months ago, another and even more costly and luxurious home adorned one of the most famous and picturesque sites on the Hudson river. It contained within its walls oil paintings alone valued at over $150,000, to say nothing of many other articles of almost priceless value to the owner, including furniture, statuary, etc., all in keeping with the magnificent surroundings. Just as the early frosts had touched the leaves of the grand old trees that surrounded this lovely homestead, and imparted to the natural scenery round about hues of the richest splendor, the entire aggregation of wealth in that architectural pile passed quickly away in smoky carbon. It was simply another sad sequel to a defective flue. Only a spark, perhaps, had found its way through a fatal crevice in the chimney, but proved quite as effective in its smouldering force as if the building had been lighted with a blazing torch. And now comes the news that the beautiful little city of Allegan, Mich., one of the most flourishing of her inland cities, has lost its entire business quarter by a fire originating in a defective flue. Surely some one must be responsible for these fatal defects in flues by which so much property is annually lost and so much sorrow and suffering entailed. In the construction of flues the builder cannot exercise too much vigilance and care. Careless workmen should be closely watched, or, what is better, they should not be employed on work which requires the greatest skill and the most vigilant attention. Every man who intends to build him a home should consult with his architect, particularly on this most essential point, and exact from the builder the most perfect work in the construction of every flue.

IN times of financial depression, the great iron industries of the country are among the first to suffer. When times are prosperous and money is seeking investment at low rates of interest at the leading financial centers, the business interests of the country are pushed along under high pressure; railroad lines are projected and rapidly built; building enterprises are undertaken demanding large capital, and pressed to completion with all the energy builders and capitalists can command; in a word, everything is borne along on a current of hope and bright expectancy. Iron, as the basis of all our industries, shares largely in the benefits of flush times; but let a reverse follow, and the mercury itself is not more sensitive to heat and cold than is iron to financial depression. When railroad progress is impeded iron gets the first blow, and it is nearly always a severe one. Iron enters so largely into almost everything constructed by man, that its value is an indication of the financial and industrial situation. It is therefore an indication that the worst of the present financial depression has passed when some of the great ironmills east and west are resuming operations, and others are preparing to set their machinery in motion.

THE excavation for the foundations of the five-story office building being erected on the corner of Canal and Madison streets, for Mr. O. A. Crary, by architect John M. Van Osdel, is completed, and the building will be rapidly pushed. This building is the pioneer of a grand move that will be inaugurated upon the west side this season, and one of the most important our city has seen. The neighborhood of Canal and Madison streets is built up almost wholly with old dilapidated frame fire-traps, and these will be torn down and give place to buildings that will be a credit to the city. These frame buildings are a continual menace to the west side, and it is only because of the superior excellence of the Chicago fire department that a conflagration (the extent of which, should it once get started, could hardly be estimated) has not occurred long since. The lot upon which the Crary block is to be erected was cleared of one of these frame shells, but the lot next it is still encumbered with one that would disgrace a "deserted village," and should be condemned and pulled down by the city authorities. The rise in values in real estate around the Board of Trade building has drawn much attention in that direction, but capitalists are beginning to find out that as important a building district lies in that portion of the west side bordering on the streets near the river, the future hardware and machinery center of Chicago.

BUILDING in all its branches has seldom been as brisk or the season's activity so pronounced at this period of the year in Chicago as it is now, and there is no probability of a setback from any cause whatever, though rumor, that fruitful source of mischief, through the agency of a writer for a leading daily, recently threatened the season's building with a serious check, if not disaster, by making a statement which, had it not been directly contradicted by interviews with leading brickmakers, might have caused the very stoppage to contracts that the writer seemed to think imminent. We can state with the authority a perfect knowledge of the case warrants that there is no panic or chance for a panic in the brick market. The facts are that last fall, though the season closed early, $80,000,000 of common brick were in stock, but so great has been the demand that almost every brick in all the Chicago yards, and the city is circled with them, has been sold, and that without advancing the price from the fall rate. Another false impression, spread abroad in the manner stated, is that the Brickmakers' Association regulate the price of brick, while the province of that body is simply to regulate the affairs of the association, leaving the price of material to be regulated by the firms handling the brick, and the contractors, understanding this, figure accordingly. The yards will commence work as soon as weather will permit, and by May 15 new brick will be available in any quantity at $7.50 to $8 per thousand. There are but one or two large firms in Chicago with facilities for making common brick throughout the winter, and they have orders for all they can produce in two months. Brick can be obtained in Milwaukee for about $8 per thousand, and the cost of transportation would be about $2. Chester, Illinois, is another source of supply, but builders generally will wait for new brick rather than go to the extra expense that the buying of brick at distant points would involve. Meanwhile there will be no "panic," no stoppage of work. Contracts will be let, excavations and basement walls will be prepared, and the brick, except in some pressing cases, will not be missed. It should be distinctly understood that there is no such thing as a "corner" possible in the way brickmaking and selling is conducted in Chicago at the present time, and the only possible check the building interest can receive, as far as human foresight can forecast, is through the ignorant or willful misrepresentations of those who write, and the daily papers who publish, such erroneous and justly censurable reports.

ASBESTOS is becoming a valuable and much used mineral. It has been lately discovered, in its purest form, in lower Canada, and the quantity is said to be practically without limit. The fibers are long, pure white, and as fine as silk, and the district covered comprises two counties near Quebec, to which city the product is brought to be crushed and cleaned, and from which point large shipments are now being made to England and the United States. The possibilities of this mineral range over a field that is simply marvelous. Fireproof paper, rope, an ink that resists the action of fire, as well as the weaving of textile fabrics, such as table-cloths, asbestos cloth, gloves, etc., while in the range of building materials, fireproof paint, packing for safes, floor deadening, roof protection, covering for steam pipes, etc., are among its more common uses. Its cheapness is its chief recommendation to many, but its thoroughly incombustible nature is of special value because, in spite of the so-called protection received from an insurance company's guarantee against fire, there are many combustible things, that could not be replaced, which can be made of asbestos and made secure from this destructive element.

THE coming season will witness the erection of a large number of unpretentious dwelling-houses in the outskirts and suburbs of Chicago. Last year a considerable amount of acreage property was subdivided, and a large number of lots were sold on terms so advantageous to purchasers, that a good many sites for homes for the middle classes were selected for improvement this season. The dwellings will embrace largely wooden buildings, in the shape of small cottage-houses, with a goodly number of brick structures. Many of these will be built on land which, as yet, is not connected with a sewerage system, and the majority will be inhabited by the laboring classes of the community, who are in receipt of regular wages. Under the control of our sanitary laws and appliances, these homes can be made healthy, even where no sewerage connection exists, but unquestionably not for any length of time. In all cases in large cities an increased mortality always goes hand in hand with defective house accommodation, ventilation, and especially water-supply, sewerage or scavenging.

TO demonstrate that such defective water-supply, sewerage or scavenging promote a high death-rate, it is only necessary to revert to large cities where there is an absence of these vital necessities. This is pointed out in an able address delivered by Sir J. W. Bazalgette, on the government of the city of London, delivered at a recent meeting of the Institution of Civil Engineers at Great George street, Westminster. He cites St. Petersburg as having no sewerage, with its water-supply taken from the river Neva, which is more or less contaminated by percolation from the subsoil, where the death-rate in a population of nearly a million is as high as 35.2 per 1,000; Cairo, supplied with water from the Nile, having no sewers, and the sewerage filtering through the subsoil into the Nile above the water intake, has a death-rate of 37 per 1,000; Vienna, with a death-rate of 29.2 per 1,000, has an average of sixty people in each house, or twice as many as in Paris, while the ratable value of the houses in Vienna is only one-sixth more than those in Paris. Pekin, with a death-rate of 50 per 1,000, is without proper sewerage, water-supply, street-cleansing, or other proper sanitary arrangements. The subject thus briefly touched upon largely affects the life and well-being of mankind, and is sufficiently interesting to invite closer and more exhaustive investigation under every variety of circumstances.

IF the little English sparrow is in any sense a pest, he is certainly not more so than when he becomes "too numerous" around our private dwellings. As the little fellow has evidently come to stay, and is sure to entail a very large and constantly increasing progeny, the time may, and doubtless will, come when he will so increase in numbers as to make him a positive and unbearable nuisance, building his straw or rag home under the eaves and in the cornices of every dwelling where he can find a lodgment. We have seen dwellings in this city where the fronts are positively defaced in the spring and summer seasons, by the persistency and industry of the sparrow seeking lodgment, and building his nest wherever an opportunity is presented for him to do so. It seems quite apparent that the time is coming when architects of private dwellings in our cities, will be requested to eliminate from their plans all places around the buildings they erect, that will afford a place of rendezvous for the pugnacious, unmusical, and pestiferous little sparrow.

ARCHITECT GEO. P. RANDALL is seriously ill from an attack of paralysis. Mr. Randall, besides being one of Chicago's oldest and most honored architects, has been one of the most active members of the citizens' committee for the inspection and improvement of tenement houses.

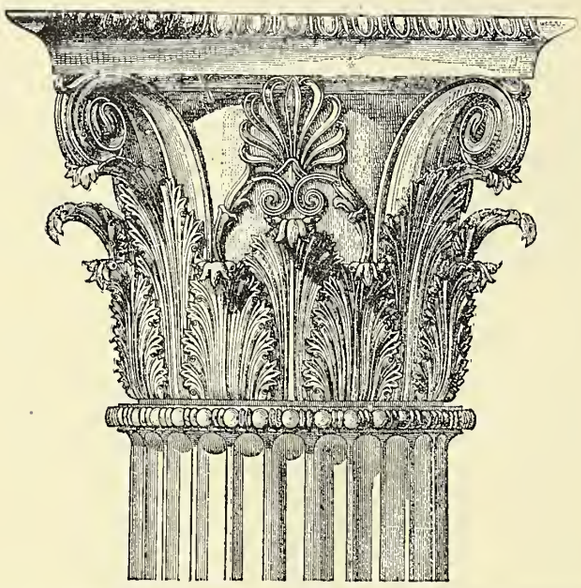
Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO

BY W. L. B. JENNEY, ARCHITECT.

PART X.—THE CLASSIC PERIOD—CONTINUED.

THE Corinthian order scarcely belongs to the best period of Grecian architecture. It was introduced after her arts commenced to decline.



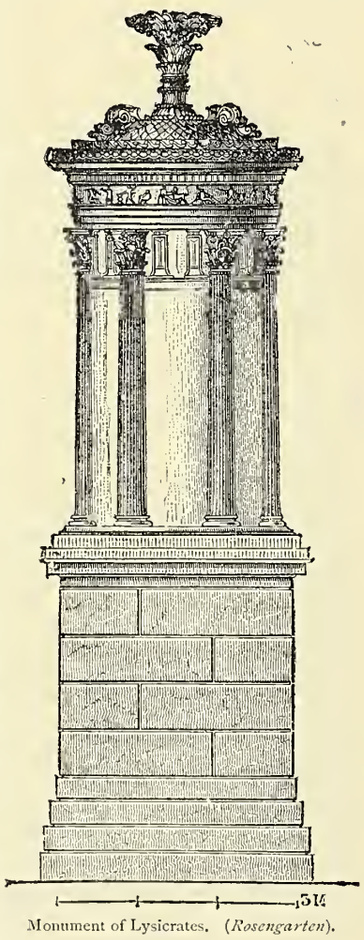
Corinthian Capital from the Temple of Apollo Didymæus at Miletus. (*Rosengarten.*)

The capital is well known. It was the most ornate of all the orders, and has been, with more or less modifications, in use from the time of its first introduction to the present day.

There was a monument on the Acropolis known as that of Lysicrates. A plain base, only nine feet square, surmounted by a circular temple, ornamented by six Corinthian columns, and covered by a roof almost Asiatic in its details. This monument, only thirty-four feet high, is beautiful in its conception and execution, although the mingling of the Egyptian and Asiatic details, for want of blending, is not quite satisfactory.

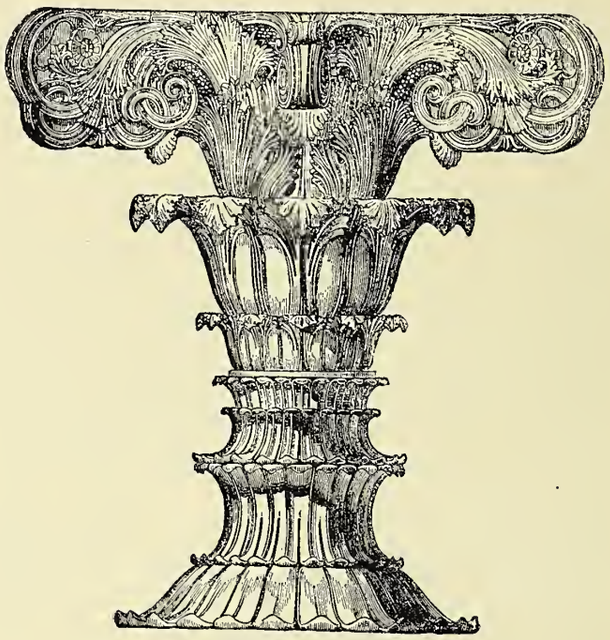
This is particularly noticeable in the finial and capital.

There is another example on the Acropolis, known as the "Tower of the Winds," that is almost entirely Egyptian, which has been copied in almost every city in this country, particularly in cast-iron work, on account of the simplicity of the capital.



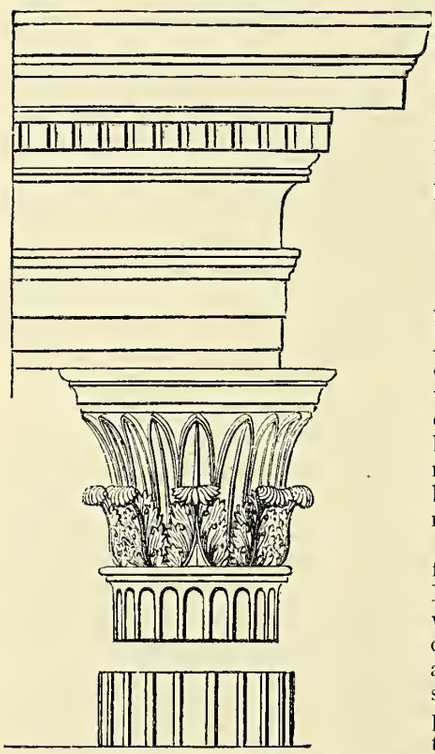
Monument of Lysicrates. (*Rosengarten*).

Fragments of Corinthian capitals have been found in Asa Minor among the Ionic temples of a date prior to any known to have existed in Greece. In the hands of the Asiatics it was the bell-shaped capital of Egypt, ornamented with the acanthus leaf and the honeysuckle; in European Greece the honeysuckle ornament was omitted and the Assyrian spiral substituted, and the whole order treated with that freedom and elegance peculiar to that nation of artists, at the time when their severer Doric order was giving place to a love of variety under the influence of the more luxurious Asiatics.



Finial of Monument of Lysicrates.

The largest example of the Corinthian order in Greece is the temple of Jupiter Olympus, a Roman temple at Athens, commenced in the second century B.C., and finished by Hadrian. It was very large, 171 feet by 354 feet, nearly the dimensions of the great hall at Karnac, and, judging from what remains, it was probably the most beautiful Corinthian temple of which we have any knowledge.



Order of the Tower of the Winds, Athens. (*Fergusson.*)

MODE OF LIGHTING TEMPLES.

This subject has been much discussed. At one time it was contended that there were no external openings, and that lamps alone illuminated their interiors, but this theory is now abandoned.

The illustration, from a design of Mr. Fergusson, agrees with what remains of the temples, and accords with the descriptions, and is, probably, substantially correct.

In size of ground plan the Grecian temples did not differ materially from that of the Mediæval cathedrals. The Parthenon, one of the smaller temples, was 101 feet wide by 228 feet long, while the temple of Juno at Samos was 190 by 346 feet. They were, however, much lower. Grecian architecture was characterized by strong horizontal lines, and the Gothic by vertical ones.

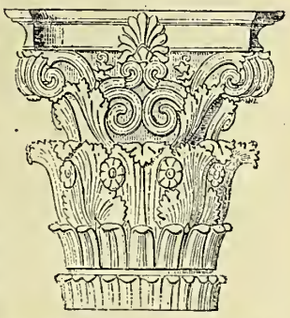
The Grecian temple was usually built on an eminence, and well detached from other buildings. This is one reason why the Madeleine, at Paris, looks so much out of place, surrounded as it is by numerous lofty buildings.

The Gothic cathedral was, on the contrary, usually built in cities; its tall spires and its strong vertical lines carried the eye upward and detached the building from the surroundings.

COLOR.

It cannot now be questioned that color was extensively used in Greek architecture, both externally and internally.

In interiors, it seems to have covered every object. On the exterior, color was used as back grounds, and even for ornaments on the surface of mouldings.

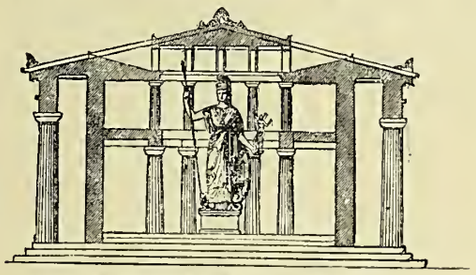


Capital of the Choragic Monument of Lysicrates at Athens. (*Rosengarten*).

Of the palatial and domestic architecture nothing remains but some imperfect descriptions.

Pompeii, it is true, was to a considerable extent a Greek city, but what we know of it belonged to a period far too late to render much assistance in restoring a Greek dwelling of the best period.

Viollet-Leduc, in his "Habitations of Man in All Ages," has united all that is known with the probabilities, in an interesting account with illustrations of the domestic life of a wealthy Greek citizen. This book contains much valuable information told in a very fascinating manner.



Section of the Parthenon. (*Furgusson.*)

From Greece the history of architecture passes to Rome, where were united all the styles of the ancient world, and where ended the classic period.

As Others See Us.

AMONG the most valuable papers published in the interest of building and architecture, is THE INLAND ARCHITECT AND BUILDER, published in Chicago.—*The Building Trade Journal, St. Louis.*

THE opening number of the third volume of THE INLAND ARCHITECT AND BUILDER (Chicago, $1.75 a year) is an unusually able and interesting one. It has fine illustrations of notable new ideas in architecture, and a great mass of interesting technical detail that must be of great value to all architects and builders.—*Toledo Blade.*

THE February issue of THE INLAND ARCHITECT AND BUILDER contains an illustration of the new Pullman Office building, and a supplement devoted to the description and contractors of the building, printed in a handsome shade of brown, and the other illustrations are fine. The reading matter is interesting to architects, builders, contractors, etc.—*Chicago Evening Journal.*

THE INLAND ARCHITECT AND BUILDER, a journal devoted to Western architectural and decorative interests, is well worth its price ($1.75 per annum) to any builder or anyone proposing to build. The views in the February number include a finely tinted double-page print of the Pullman Palace Car Company's Office building in Chicago. It is published monthly in Chicago.—*The Daily Jacksonville, Ill., Journal.*

THE INLAND ARCHITECT AND BUILDER (17 Tribune Building, Chicago) is one of the best authorities on correct taste in architecture and decorations. Its March number has for a supplement an excellent engraving of the Pullman Office building in Chicago, a structure ten stories in height and imposing in appearance. A view of the interior of Oriental Masonic Hall, Chicago, is given also, with details of its finish, it being decorated in elegant and pure Mooresque style. THE INLAND ARCHITECT is peculiarly valuable to professionals as well as to any and all contemplating the erection of a business block or residence.—*Indianapolis Journal.*

WITH the February number THE INLAND ARCHITECT AND BUILDER enters upon its second year under the most favorable auspices, having had a growth in all respects far exceeding the most sanguine expectations of its publishers. The present number is of beautiful typographic appearance and contains a large amount of useful and interesting information in regard to construction, decoration, furnishing, etc., as well as many fine illustrations of architecture; a notable one being the Pullman Palace Car Company's building in Chicago. W. L. B. Jenney, the well-known architect, also contributes a valuable illustrated article. Published monthly by the Inland Publishing Co., 17 Tribune Building, Chicago. Price $1.75 per year.—*Battle Creek, Mich., Daily Journal.*

Designing Arched Iron Roofs.

AN English exchange (*The Engineer*) throws out some facts and suggestions on the construction of arched iron roofs that may be read with interest, if not profit, by architects and builders generally, particularly in the treatment of resistance and pressure, in which it would seem there are ideas that might be utilized elsewhere in the construction of buildings where those elements enter into the question. Says the *Engineer:*

It may be taken as a fact that most architects of ironwork for roofs would prefer clean arches to trusses or arches with ties wherever circumstances are favorable, and also that many structures are put on paper, and some are brought into existence, where this is not the case. An arch presses upon its supports in an inclined direction; there is, consequently, besides the vertical component of the pressure also a horizontal one, and this must be provided for as well as the vertical pressures of a simple girder which nobody ever expected to float in the air, or it ceases to be an arch. Cases of an entire neglect of this provision are rare; it is said that the arched ribs in the Exhibition building of 1851—now the Crystal Palace—were first put up without the necessary abutments, and that the bracings between the columns which here and there block the passage were introduced after the horizontal thrust of the ribs had manifested itself; but, on the other hand, the thickness of these ribs is so great, eight feet, that they might have been intended to act as girders; and we have no right to find fault with the architect for wishing to ascertain, by experiment, how much such a girder would spring outwardly under the action of the load, especially if we remember that something equivalent to the bracings would have been required in any case.

More frequent are cases where the provision for the horizontal thrust is insufficient, whether it be that the abutments are formed by buildings not specially designed to resist the thrust, or if there are aisles on each side made of iron framework, that this is sufficiently braced; or again, that the thrust of a second roof is made to bear on the first, in which case a change of the load upon one of them disturbs the equilibrium in both. In such cases the fact that the materials are much stronger, and the forces much weaker, than what has been calculated upon, compensates for the deficiency of the designs. If that were not so, it would often be impossible to explain why some roofs in exposed localities, resting on cast iron stilts, with nothing but a few thin anchor bolts at the bottom, still brave the pressure of the wind, or why in some cases the abutments of clear arches are not destroyed by a heavy snowfall. We therefore regard with particular satisfaction structures such as the great roof over the Midland Railway terminus in London, which are based upon generally sound principles of construction. In that structure the ribs spring from the firm ground, and their stability is independent of the stability of the side walls. The rationality and simplicity of the idea, together with the thoroughly workmanlike manner in which the structural details have been composed, has had the natural consequence that several structures in and out of England have since been erected on the same principle. This principle being that of a firmly fixed arch, also deals successfully with the question of wind pressure. Assuming the wind pressure to act horizontally, or nearly so, the bending moment at the windward springing is one bending outward convex, *i. e.*, lengthening the outer boom, and is often more than double as large as that at the leeward springing, which bends outward concave. The moments from the vertical loads at the springing are generally bending outward concave, because the ribs do not spring from the ground in the direction of the inclined thrust, but vertically. The moments from the wind pressure are generally larger than those due to the load, and we have therefore at the windward springing the difference between a large and a small moment, and on the leeward springing the sum of two small moments. Those points, the most important in that class of structure, are therefore in a particularly favorable condition.

If the importance of this advantage was recognized in the design of abutments, it is difficult at the same time to account for the very artificial contours of some arches, by which the designers apparently endeavored to approach the form of the catenary for the vertical loads, for whoever has calculated the moments from the wind pressure on such arches must have come to the conclusion that simple circular or elliptical outlines would have been quite as good or perhaps better than those based upon a superficial application of the theory of stresses. In any case the difference would be too small to justify the deviation from the simple outlines. But we question whether the methods of calculating the strain in arched roofs as usually applied by architects are very sound, and whether the determination of the acting forces and the coefficient of safety is based upon real conditions. When we hear that one architect assumes forty pounds per superficial foot, including dead weight, snow and wind, with a strain of six tons per square inch of wrought iron, or another fifty-six pounds with eight tons, we suspect that these figures are treated as vertical forces. The result of such treatment cannot agree with the actual conditions, since the greater portions of those amounts are horizontal forces. We have stated that at the springing of the arches referred to the bending moments from the vertical loads are much smaller than those from the wind pressure; but this condition depends on their form, and if an arch is placed on the top of two high columns or walls, the condition is reversed, especially if the arch is not rigidly fixed, and the bending moments from the vertical loads at the bottom of the columns or walls—now the real springing of the structure—are generally much the larger. It is then necessary to introduce a tie at the most convenient place, viz, at the top of the columns or walls. This is known by every novice in designing, and recognized as an axiom; and if, nevertheless, an architect—for instance, the architect of the new terminus of the London, Brighton & South Coast Railway at Brighton—is led by his objection to tied arches to ignore such axioms, we are bound to assert in defense of the profession that such perversity of mind is quite exceptional.

Is, then, a tied arch æsthetically so very objectionable? We readily admit that the common arch roof, with curved ties and radiating stays, or secondary ties, when viewed in perspective, has a confused and restless

appearance, especially if the eye meets with clumsy machinery details, such as cottars, forked eyes, and pins with heads and washers, as if the structure were intended to oscillate in all its joints; but we do not see why this should always be so. Why cannot the ties be made straight and horizontal, supported once in the center, or, if very long, twice more, by means of thin vertical rods? and why cannot the connection be designed in an idealized manner, as is customary in architectural ornamentation, showing, for example, the tie-rod as growing out of an ornament, from which also springs the rib, or otherwise? Such a structure could probably be made with the same quantity of material as an ordinary truss, and being free from the confused appearance of diagonal ties and struts, it would also have the advantage of offering some resistence to an upward lift. Moreover, the educated eye instinctively tries to find a clear demonstration of the broad principle which pervades a design. Obscurity or concealment, however skillful the latter may be, are faults in designing, and should be avoided if possible.

Building-Stone.

PAPER READ BEFORE THE CHICAGO ACADEMY OF SCIENCES, NOVEMBER 27, 1883.

BY W. L. B. JENNEY, ARCHITECT.

III.

(*Continued from page 7, Vol. III, No. 1.*)

WE will now pass to sedimentary rocks. Sandstone was formed in all the later geological periods. It is a stratified rock, consisting of grains of sand derived from the disintegration of silicious rock cemented together by a natural cement composed usually of silica, lime and alumina.

In the most durable kind of sandstone this cement is almost pure silica, and in the weaker stones it consists quite largely of alumina or clay. Lime, when present in this cement, renders the stone particularly liable to disintegration when exposed to an impure atmosphere, or when used for foundations washed by water containing acids capable of attacking the lime. The presence of clay (silicate of alumina) or of protoxide of iron is very injurious. Sandstones vary in quality between very wide limits, some being very hard; for example, the Vert Island Red Sandstone and other kinds being the most friable of our building-stone.

The diamond saws of the Young & Farrel Company will cut through about eight inches of the Vert Island stone per hour, while they will cut through thirty inches of Amherst stone in the same time.

The strength and durability of the best sandstone, together with the ease with which it is worked, causes it to be extensively used, more so probably than either of the other kinds. The color varies greatly; light grey, yellowish cream color, dark grey, bluish, and several shades of red to brown. It is often called "free stone" from the ease with which it is worked, though this name is applied to any free-working stone. Water will pass between the layers of many sandstones, which makes it important that such stone should be set on their natural bed, or large pieces may be scaled off. I have known front steps of brownstone to separate between the layers of stratification, so as to give a hollow sound when struck with the heel, and even to scale off over the entire surface.

There are several classifications of sandstone, many of which are, however, local. In Scotland, and to some extent elsewhere, Liver Rock is a term applied to the best and most homogeneous sandstone, which comes out in large blocks undivided by intersecting vertical and horizontal joints.

Flagstones are those which have a good natural cleavage.

Grits are coarse-grained, strong, hard sandstone, from the millstone grit formation in which they are found. They can be obtained in large blocks, and are in consequence much used in heavy engineering work.

Micaceous Sandstone are those containing a very large proportion of mica distributed over the planes of bedding.

Calcareous Sandstone contains a large proportion of carbonate of lime.

Feldspathic Sandstone contains a large proportion of feldspar, generally derived from the disintegration of granite, or other feldspathic rocks. The weathering qualities of these depend upon the quality of the feldspar.

Metamorphic Sandstone are those which have been subjected to heat. They make a fair road metal or McAdam.

The recent fracture of a good sandstone will be bright, clear and sharp. The grains should be of fairly uniform size and well cemented together. This examination is best made with a magnifying glass. A dull, earthy appearance indicates a poor stone, not likely to weather well. The size of the grains is not important and of itself is no indication of the quality.

From the extreme north of Lake Superior, in Nepigon Bay, we have:

The Vert Island Sandstone.—It is of Old Red Sandstone or Potsdam formation, uniform in color, density and texture. The deposit is from 15 to 30 feet thick and covering 40 acres. It is a Liver Rock, showing no signs of stratification. The microscope shows the stone to be composed of quartz and feldspar, with very little mica, and is of a close, compact texture.—*Merrell, Smithsonian Institute, Dept. Rocks and Building Stones.*

Analysis by C. F. Chandler:

Stands fire well: cubes heated to white heat and thrown in water were but little affected. Crushing weight, 10,304 pounds per square inch.

Silica	83.14	Sand	69.00
Alumina	4.11	Feldspar	23.00
Potash	3.17	Carbonate of lime	5.00
Soda	0.54	Oxide of iron	3.00
Protoxide of iron	2.86		
Lime	2.48		
Magnesia	0.30		
Moisture	0.20		
Unascertained	0.89		
	100.00		100.00

Modina red sandstone, from New York, much resembles the Vert Island of Lake Superior.

Connecticut red sandstone, of much softer texture, more easily cut and can be used for carving rich mouldings, etc., where the harder stones would be too expensive. I have also a sample of the red Scotch sandstone known as Corse Hill, of good texture and bright in color, Berea, Millstone Grit, Amherst (grey) sandstone, Euclid, Aux Sable, Minnesota, Columbia, Warrensburg, Mo., etc., each having its special qualities, adapting it to some special use. The Vert Island is very hard, the Columbia is soft: some are dark, others of soft, light warm color.

Our last division is the limestones. The name is applied to any stone that is composed in large part of carbonate of lime. They are attacked by strong acids, which expel the carbonic acid, causing effervescence, and form new salts with the lime. The carbonic acid is also expelled by heat, forming oxide of lime, caustic lime or quicklime, as it is called.

Limestones differ greatly in chemical composition, texture, hardness, and other physical characteristics. While some are as strong as granite, others are as soft and friable as the weakest sandstone. Limestone is generally easily worked. There are two main divisions of limestone—the granular and the compact. Both yield excellent building stone. Limestones which take a smooth surface and fine polish are usually called marbles and are usually found in mountainous districts.

Common limestone is often found in immense strata as deposited on the bed of the ancient ocean.—*Thurston.*

The best weathering limestones are dense, uniform and homogeneous in structure and composition, with fine, even, small grains and a crystalline texture. Some limestones consist of a mass of fossils, either entire or broken up and united by cement. Others are made of round grains of carbonate of lime generally held together by cement of some material.

The Royal Commissioners of England gave preference to limestones as a class "on account of their general unanimity of tint, their comparative homogeneous structure, and the facility and economy of their conversion to building purposes," and of limestones they preferred "those which are most crystalline." Many limestones are most easily worked when first quarried, and harden on exposure to the atmosphere. The cause is not well known. Small quantities of potash have been often observed in such stone, and to this some French engineers attach considerable importance. Limestones are classified as marbles, compact limestones, granular limestones, shelly limestones and magnesian limestones.

Any limestone is called a marble that is hard enough to take a polish. Their appearance varies greatly, from white to black, with all imaginable combinations of colors; some of the most beautiful derive their colored veins from the accidental introduction of metallic oxides. Many of the marbles used by the ancients, and handed down to us as works of art, are not now known in their natural state.

Compact limestones consist of lime, either pure or combined with lime or clay. In general it has no crystalline structure, and is of a dull earthy appearance. They are not much used as cut-stone, but make good rubble.

Granular limestone consists of grains of carbonate of lime cemented together by the same substance or by some mixture of carbonate of lime, silica or alumina. These limestones are generally found in the oolite or eggstone formation. The grains vary greatly in size. In some they are very small and uniform, very few being of larger size. When the whole of the grains are somewhat larger, they constitute what is called roe-stone, the structure resembling the roe of a fish. When the grains are of the size of peas, the stones are called pea-stones. Nearly all of these stones contain fossil shells. In some cases the shells form more than half the stone; they are then called shelly granular limestones. The color of granular limestones is very variable. White, light yellow, light brown, bluish, etc. These granular limestones are generally soft and somewhat absorbent, and are liable to the attacks of acid atmospheres and frost, but otherwise weather well. They afford some of the principal building stone.

Examples. The Bedford stone, the Minnesota stone, the new quarries of Delta county, Michigan; one a very hard, another of soft, warm salmon color, very useful.

Magnesian limestones are composed of carbonates of lime and magnesia in variable proportions, together with a small quantity of silx, iron and alumina. Many limestones contain a small quantity of magnesia, but those that contain less than 15 per cent are not called magnesian limestones. There is a magnesian limestone known as dolomite, in which there is one molecule of carbonate magnesia, 54.18, to one of carbonate of lime, 45.82; in this proportion they seem to unite chemically and give some peculiarity to the crystals which makes the stone exceedingly durable. Prof. Daniel states that the nearer a magnesian limestone approaches dolomite in its composition, the more durable it is likely to be.

Example. The most prominent is the magnesian limestone of Chicago, called variously Athens stone, Athens marble, Chicago limestone, Joliet limestone, etc. It contains carbonate of magnesia, 41.00; carbonate of lime, 36. Very near the proportion of Dolomite.

Analysis of Prof. J. V. E. Blaney:

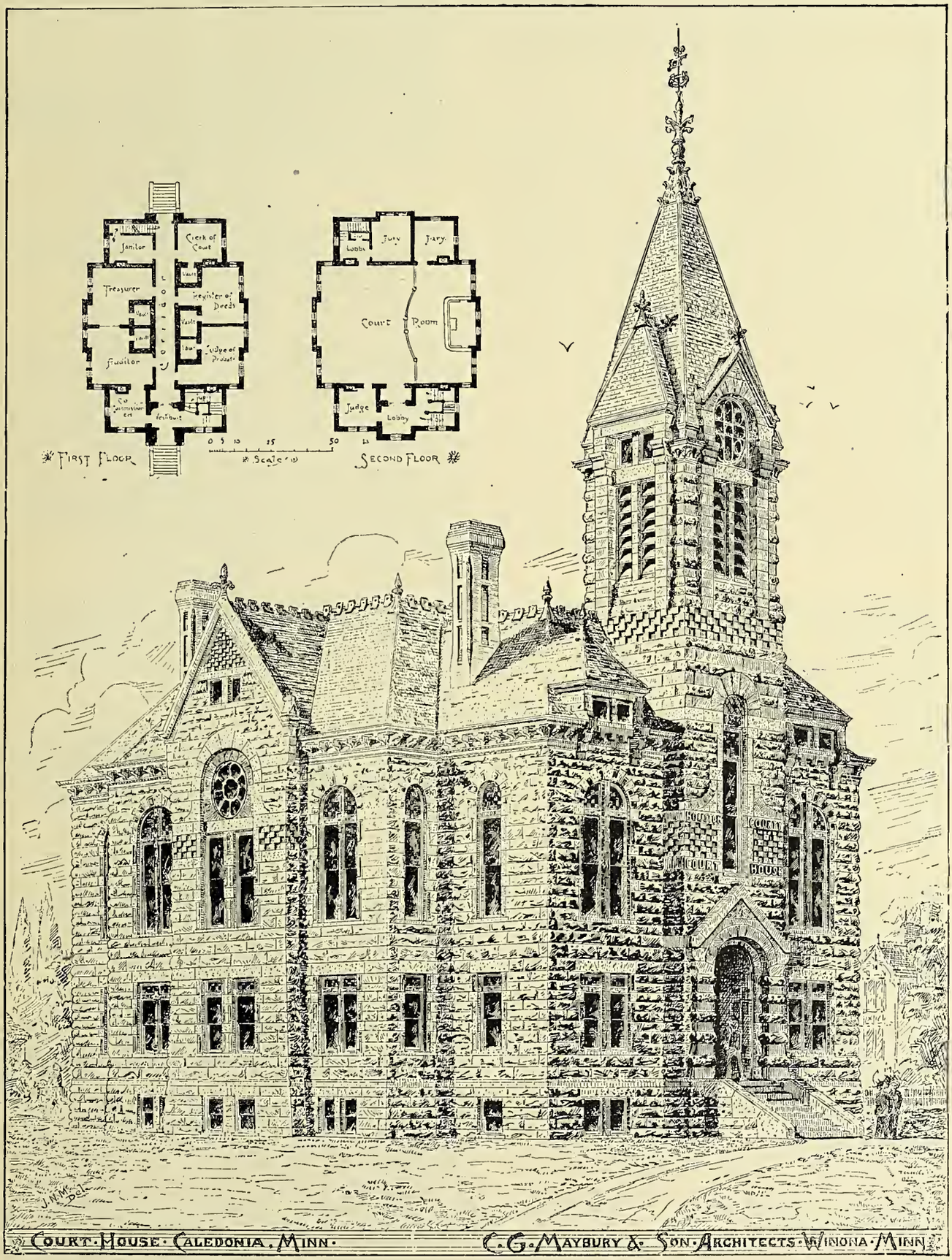
Silica and clay insoluble in acids	17.33
Alumina	1.33
Carbonate of protoxide of iron	0.96
Carbonate of magnesia	31.00
Carbonate of lime	36.00
Water	1.00
Alkalies (not estimated) and loss	2.38
	100.00

Tests by W. Shippen, of Smithsonian Institute:

Greatest crushing force to 1 square inch in lbs. avoird	22,301
Least " " " " " "	15,690
Average from seven specimens " " " "	17.309
Weight 180 lbs. per cubic foot	rough
" 160 " " " "	dressed

AUTHORITIES.

Notes on Building Construction. South Kensington. Part III.
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DANA.—Mineralogy. Geology.
Q. A. GILLMORE.—Tests.
PROF. CHANDLER.—School of Mines, New York.
MERRILL.—Smithsonian Institute. Analysis.
PROF. J. V. Z. BLANEY.—Analysis.



COURT·HOUSE·CALEDONIA, MINN· C.G.MAYBURY & SON·ARCHITECTS·WINONA·MINN

The Builders and Traders' Exchange.

MEMBERS continue to multiply, and the interest which attended the organization of the association a month ago has not decreased. In fact, the need was so apparent, and the advantages to be gained so great, that nearly all the leading members of the building profession in Chicago have expressed a wish to become part of the organization, and in the near future, perhaps another year, will see the Exchange occupying their own building, built by a syndicate of its more wealthy members. Meanwhile, the present intentions and the future plans of the Builders and Traders' Exchange, is outlined in the following circular, which has just been issued to the craft, which is included in a report of the board of directors at a recent meeting. It is as follows:

The board of directors beg to report that suitable quarters for the Builders and Traders' Exchange have now been secured.

The hall (40 by 80), well lighted at both ends by windows, and by skylight in the center, on the first floor, centrally located, and easily accessible from both Clark and La Salle streets, in the National Life building, will accommodate the Exchange until it is ready to occupy permanent quarters, erected especially for its own use. To build and own such at the earliest possible moment, is our aim. In the meantime, the building in which it is now about to establish itself, will furnish ample accommodation for Exchange purposes, and also office room to builders and others, who may desire to be near it. Quite a number of such offices have already been taken, assuring the establishment of a builders' headquarters. We desire to say, in this connection, that this Exchange hall may and will be used for meetings of trade associations in the evening. The membership roll now numbers between three hundred and four hundred names, embracing the best-known dealers and manufacturers of rough and cut stone, granites, brick of all varieties, iron, tin, glass, terra-cotta and tile, hard and soft lumber, paints, sewer-pipe, lime and cement, sand and gravel, heating apparatus, and other building appliances, and representatives of all building trades, particularly masons, stonecutters, carpenters, stair-builders, foundrymen, galvanized-iron workers, gravel, slate, and tin roofers, plasterers, painters, plumbers, millmen, excavators, bellhangers, and so forth.

It is our aim to admit only those of an established business reputation. The committee on membership spares no pains to gain that end. We trust no mistakes have been made. But if it should happen that a firm or trader is elected to membership who is not honest and upright in his business dealings, our by-laws provide for his expulsion, and the by-laws will be enforced. Thus it may be deemed a distinction now to hold a membership in the Builders and Traders' Exchange, and we trust the time is not far distant when it will be a reproach *not* to number among its members.

An Exchange directory for 1884 is now in course of preparation, in which all will be enumerated who may be admitted by April 1. This book will also contain the fire, health and building ordinances of Chicago revised to date.

In conclusion, we desire to thank the Master-Masons and Builders' Association for its kind offer to accommodate our members in its room (which after May 1 will be a part of our hall) until our own quarters can be arranged. All members are welcome now, though the rules for government of the Exchange will not be enforced until after May 1.

The Exchange, although its separation from the Permanent Exhibit is to be deplored, the effect being to abridge the growth and usefulness of each, should be supported by every builder, whatever his line may be in Chicago; and for the general information of those belonging to those trades mentioned in the above circular who have not joined, the by-laws are given.

ARTICLE I.

MEMBERS.

Any individual or firm of mechanics, manufacturers or traders, of good repute, whose vocation connects them with the trades or industries of building, may become a member of this exchange, upon election by the board of directors.

The name of any person wishing to become a member of the exchange shall be posted in a conspicuous place in the exchange room, for one week after his application is received.

Objections to the admission of any applicant must be made to the board of directors, in writing, signed by the objector, who, through its proper committee, will elect or reject the applicant, at its next regular meeting.

The election of any applicant shall be void, unless the initiation fee, hereinafter fixed, is paid to the secretary within two weeks after notice of such election may be mailed to said applicant.

Upon payment of the fee, the member shall sign the roll, thereby pledging himself to observe all rules and by-laws of this association, and receive his membership card, and shall then be entitled to an interest in the fund then in hand, or thereafter to be accumulated, and to all profits which may accrue to the association, as long as he continues to pay the annual dues in advance, or is not otherwise disqualified.

The names, business address and residence of all members, together with number of letter-box held by them in the exchange, shall be permanently posted in the exchange room.

Upon retirement from active business, any person who has been a member in good standing may be elected a life member.

ARTICLE II.

OFFICERS.

The officers of this exchange shall be a president, two vice-presidents, a secretary, a treasurer and ten directors.

The executive officers shall be elected at the annual meeting, for a year. At the same time, five directors shall be elected for the term of two years, and also three inspectors of elections to serve at the next annual.

All officers shall serve until their successors are duly elected and have qualified.

Should vacancies occur among the executive officers, the board of directors shall fill them; and in case of vacancies in the board of directors, the president shall appoint a member, or members, to serve for the unexpired term.

ARTICLE III.

DUTIES OF OFFICERS.

1. The president shall preside at meetings; be chairman of the board of directors; appoint special and standing committees; approve all bills, by his signature, before they are paid; direct secretary to post notice of meetings; shall countersign certificates of membership, and have the casting vote at all times.

2. The vice-presidents, in the order of their seniority, shall preside at meetings in the absence of the president, and in case of sickness or protracted absence of that officer, shall approve bills and discharge his other duties.

3. The secretary shall keep a record of all meetings, and the accounts of the association, in books provided for that purpose; shall give notice of all meetings; collect all moneys due and turn them over to the treasurer, upon demand; receive and post all applications for membership; notify all new members of their election; issue all certificates of membership, and affix the seal of the exchange thereto; countersign all bills, and do all other duties properly belonging to his department, or required of him by the president or board of directors.

4. The treasurer shall receive all moneys from the hands of the secretary, and pay all bills approved by the president and countersigned by secretary, and render a full account, at the annual, of moneys received and paid out during the year, and to the board of directors whenever called upon.

Before entering on their duties, both the treasurer and secretary shall file with the president an indemnifying bond, payable to the exchange for an amount and with such sureties as may be approved by the board of directors, and at the end of their service they shall turn over all funds, receipts and papers in their hands to their successors duly qualified.

5. The *Board of Directors* shall have charge of all property of the exchange not in hands of the treasurer; shall fix the compensation of the secretary and treasurer for their services, and appoint all employes and determine their salaries.

Whenever the cash in hands of the treasurer shall exceed the prospective running expenses of exchange for a year, such surplus may be invested by the board in bonds of undoubted security.

From their number, the president shall appoint, within one week from the election, the following standing committees, each consisting of five members: a committee on membership, a committee on rooms, a committee on arbitration, and a committee on finance.

a. The committee on membership shall meet every Monday, receive all objections to applicants for membership, and treat such objections as made in confidence; elect or reject all whose names have been posted for one week, and report the result of their labors to the secretary.

b. The committee on rooms shall have charge of the rooms used by the exchange, and shall see that all necessaries are properly appointed. They shall formulate and post rules for the government of members and visitors to the exchange, and see to the enforcement thereof.

c. To *The arbitration commitee*, any matters in dispute, or differences between members, or members and others, may be referred for settlement.

The secretary shall act as clerk of the committee.

All persons who may desire the services of said committee shall file with the clerk an agreement to submit their case to the committee, and be bound by its decision.

When such agreement is filed, the secretary shall call a meeting of the committee as soon thereafter as may be practicable and convenient to the parties concerned, to hear and decide such controversy; and each member of said committee who shall be present at the hearing of such case, and the secretary, shall be entitled to the sum of five dollars for each sitting, to be paid in equal parts by each party to the controversy.

d. The Finance committee shall suggest financial measures to the board of directors, and audit the books and accounts of the secretary and treasurer, and report the result of their finding at the annual meeting.

ARTICLE IV.

INITIATION FEE AND DUES.

Until the membership of this exchange shall have reached five hundred, the initiation fee shall be $25. From that, and until the membership shall be one thousand, the initiation fee shall be $50. Thereafter, the initiation fee shall be $100.

The annual dues shall be fixed by the board of directors, at their first meeting in May, in an amount not less than $10, nor more than $20.

None shall be liable for dues for the current year of their initiation.

ARTICLE V.

MEETINGS.

There shall be an annual meeting on the third Monday of January, for the election of officers, and such other business as may regularly come before it.

Special meetings may be called by the president at any time, and shall be called at the written request of any ten members, stating therein the subject they desire to bring before such meeting.

Notice of such meeting and the subject for discussion, shall be posted in the exchange room for one week previous thereto by the secretary, and also mailed to each member at least three days before the meeting.

At the hour of 12 M., on the first Tuesday after the first Monday of January, the president shall call the members present to order, and appoint a committee of five, whose duty it shall be to nominate a member for each of the offices to be filled at the annual meeting; to post the ticket so made (printed on plain white paper) in the exchange at least five days before the annual.

The annual meeting shall be called to order at 12 M. After the reports of secretary and treasurer, properly audited by finance committee, have been presented, the polls shall be opened in charge of the inspectors of election, who shall receive each ballot, and, upon ascertaining that it is offered by a member entitled to vote, they shall deposit it in the ballot-box. At 5 P.M. the poll will close, and the inspectors will canvass the vote and announce the result to the evening meeting.

A plurality of votes cast shall constitute an election.

ARTICLE VI.

DEFAULT IN PAYMENT.

Any member who shall neglect to pay the annual dues for the period of three months from May 1, shall be fined one dollar for each month or part of a month he shall so neglect beyond the three months provided for; and until such dues and fines are paid, he shall have no vote, and at the next following annual meeting, if such monies still remain unpaid, the names of such delinquents shall be publicly announced by the officer in the chair; their names shall be stricken from the roll; they shall be entitled to none of the benefits of the exchange, and any interest he or they may have had in its property shall revert to the association.

ARTICLE VII.

EXPULSION.

Should fraud or dishonorable business practices be charged against a member, the committee of arbitration shall investigate such charge at once and report its finding to the board of directors. If the charge is sustained by evidence, the president shall publicly announce the expulsion of such offending member, and his interest in the property of the exchange shall cease.

A member who has submitted his case to the decision of the arbitration committee, and refuses to abide by such decision when made, shall be deemed to be guilty of dishonorable business practices.

ARTICLE VII.

QUORUM.

Twenty-five members shall constitute a quorum at any meeting of the exchange.

ARTICLE IX.

AMENDMENTS.

Additions, alterations or amendments to these by-laws may be made by a two-thirds vote of members present at a special meeting called for that purpose, after such proposed additions, alterations or amendments shall have been posted in the exchange room one month previous to the meeting.

ARTICLE X.

RULES OF ORDER.

The rules of order laid down in Cushing's Manual shall govern.

A New Panorama Building.

THE interest which has been created by the panorama of the Battle of Gettysburg, which has drawn full houses daily and nightly for months, with signs of an ever-increasing patronage, has prompted the erection of another similar building by the American Panorama Company, on the corner of Hubbard court and Wabash avenue. The designs are by Architect John M. Carrere, of New York, to be superintended by Architects Jenney and Otis. The contract for the ironwork is already let to the Globe Ironworks, and others will be let so that the building will be completed by June 1. The structure will be iron and brick with stone basement. The design for the entrance is very attractive; offices will occupy each side and a small café above, a tile roof covering this, while the entire interior will be finished in Georgia pine. The painting will be the Siege of Paris, and will be of great interest to the Western public; and in a time of peace like the present these two great war pictures, one representing the culmination of a contest between two of the greatest European powers, and the other the turning-point in our nation's history where the minutes held the shaping of ages of history and the entire future of our great republic in their grasp, will educate the rising generation in the thought that in times when the nation was in danger, the citizens were ready to forget the home of peace for the field of war, and gave all they had, their lives, in their nation's defense.



Inland Architect and Builder Print.

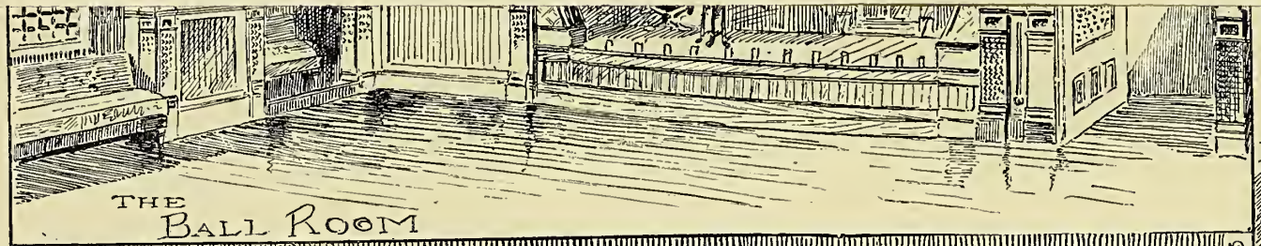
D.—Jaffray & Scott, Architects.



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Inland Architect and Builder Print.

THE COMMERCIAL NATIONAL BANK BUILDING, CHICAGO.—Jaffray & Scott, Architects.



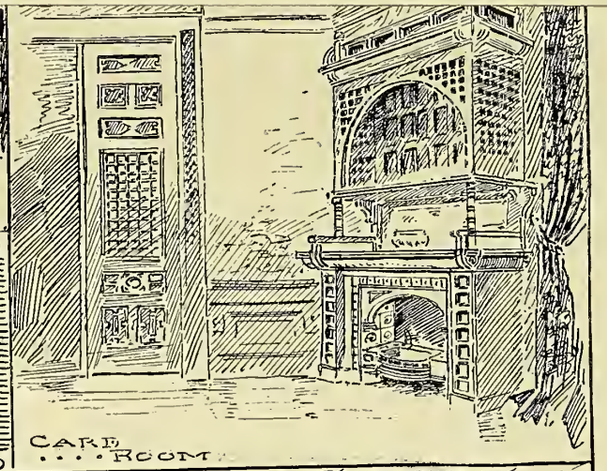
THE BALL ROOM

RESIDENCE

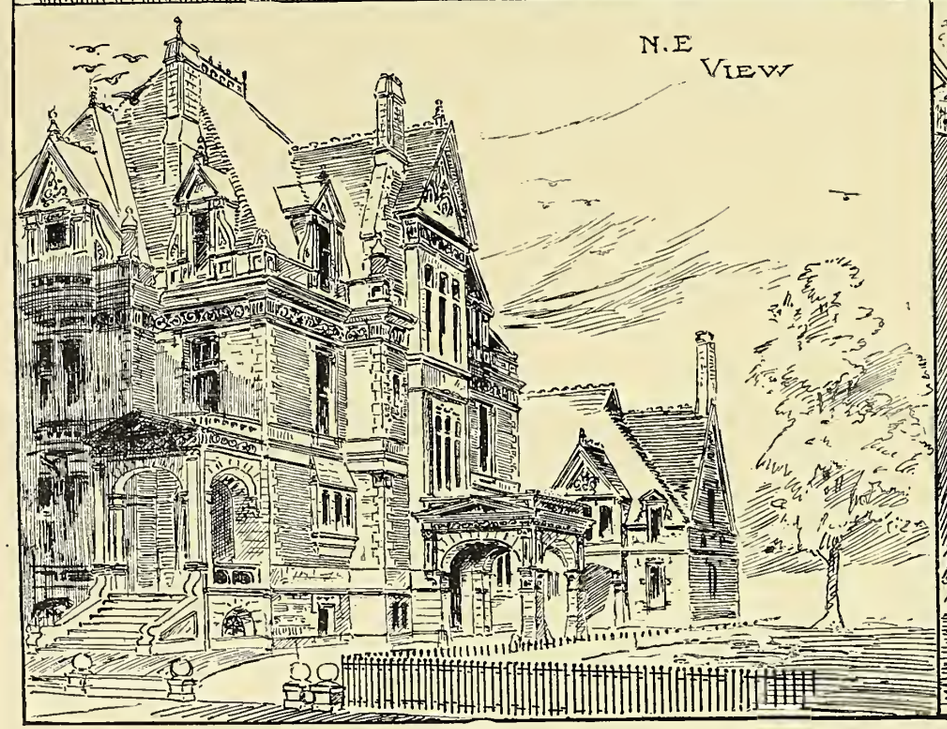
OF M.D. WELLS ESQ.

WHEELOCK AND CLAY, ARCHITECTS

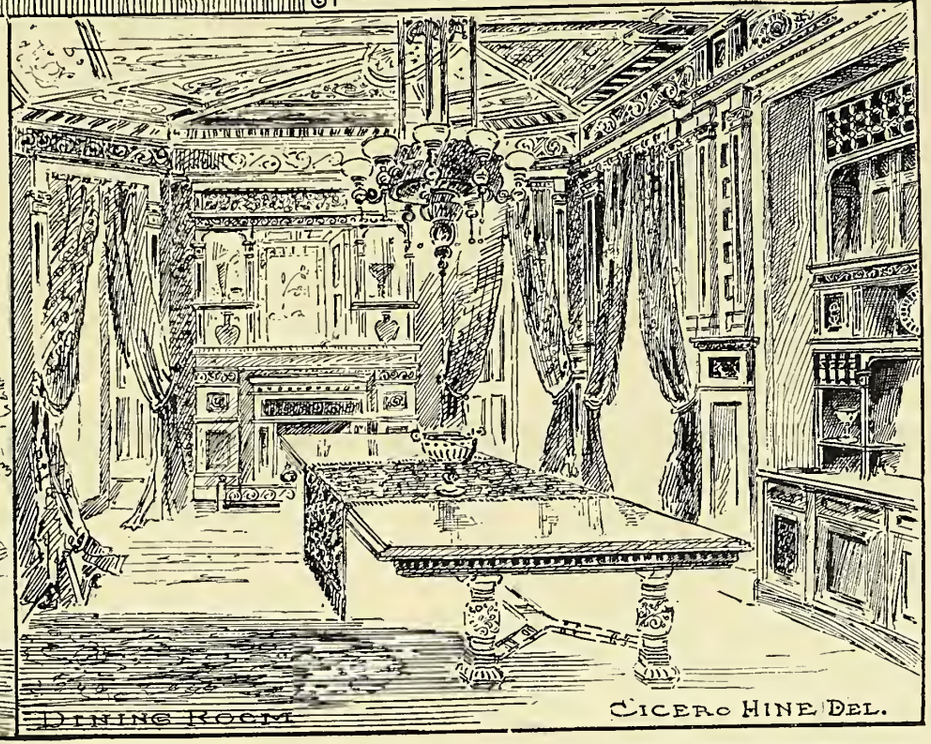
CHICAGO



CAFE ROOM



N.E VIEW

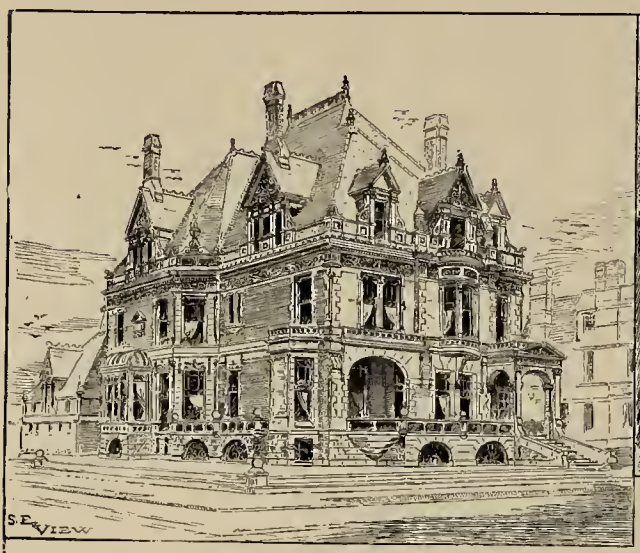


DINING ROOM

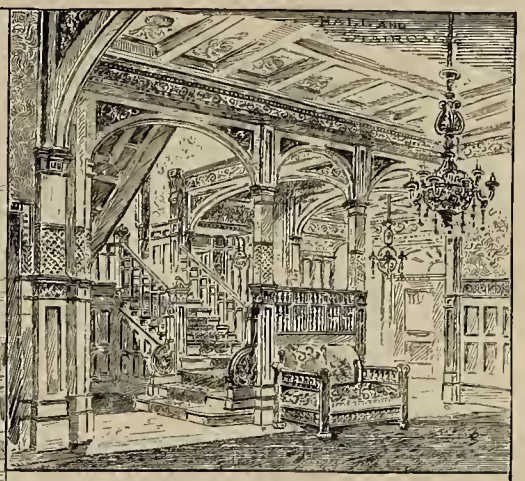
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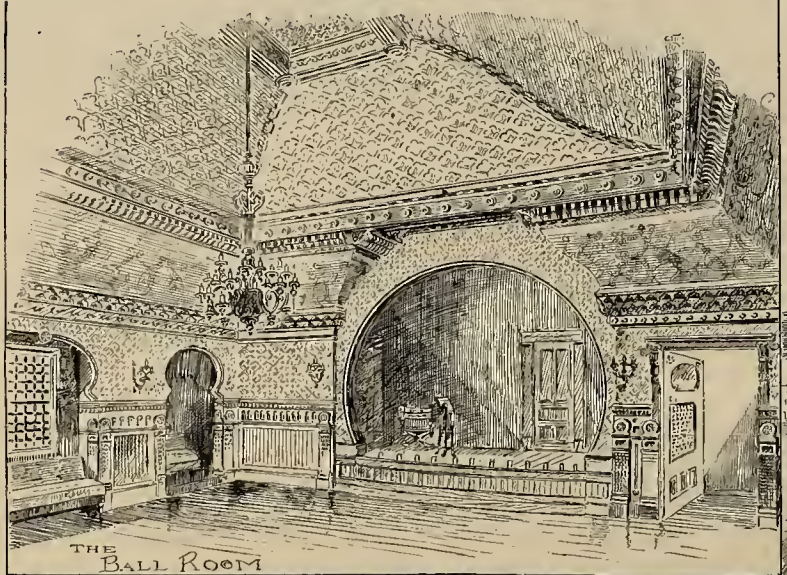
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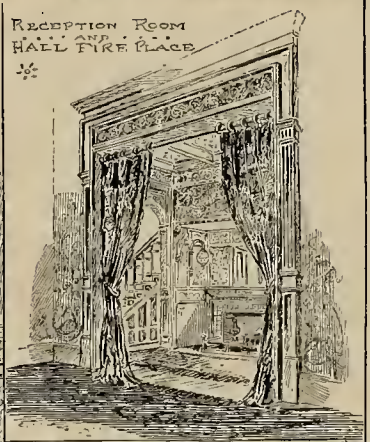
S.E. View



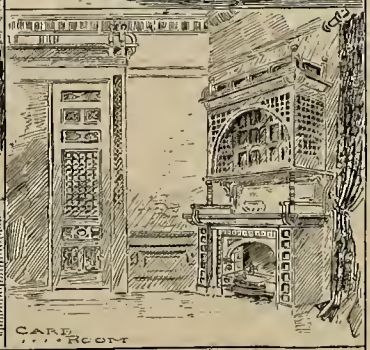
Hall and Stairs



The Ball Room

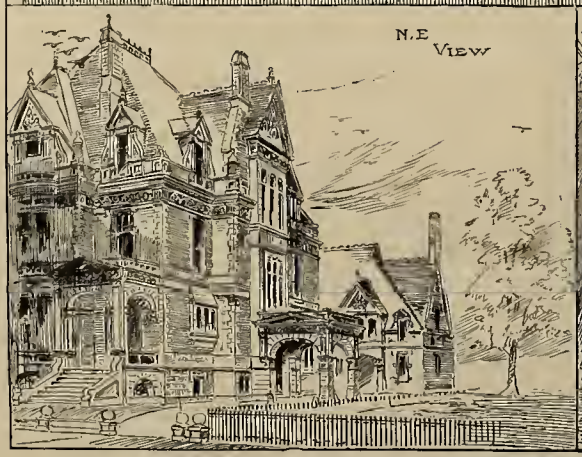


Reception Room Hall and Fire Place

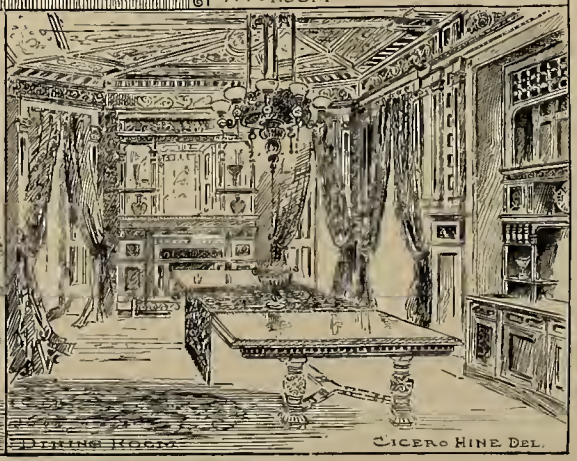


Card Room

RESIDENCE
of M. D. WELLS Esq.
WHEELOCK AND CLAY ..... ARCHITECTS
CHICAGO



N.E View



Dining Room

Cicero Hine Del.

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Architectural and Building Notes.

The Northwestern Terra-Cotta Works have just completed a new kiln, which will hold one thousand cubic feet of material.

The estimated rental for office buildings in the neighborhood of Dearborn and Monroe streets, Chicago, is one hundred and forty per square foot.

In February, 1883, the Chicago City Building Department issued permits for one hundred and sixty buildings, at a cost of $501,720, and in February, 1884, for two hundred and seventy-nine buildings, at a cost of $1,781,000.

An automatic passenger elevator for use in private residences is one of the latest conveniences introduced. The elevator is made so that it requires but slight effort to operate it, and the possibility of accident is avoided by an arrangement of weights that are automatic in their action.

Architects Cobb & Frost are still at work on the plans for the new opera-house; though from the fact that the land is encumbered by a building owned by the Johnson estate, with the possibility of legal difficulties before it can be torn down, there is some uncertainty about the time the erection of the opera-house will commence.

The Indiana State Asylum Commission has accepted the plans of Architect E. H. Ketcham, of Indianapolis, for the buildings at Evansville and Richmond, and they are to be ready for the contractors by March 10. Bids for the work will be opened the 8th of April. No action has yet been taken relative to the material of the building at Logansport.

The Master Plumbers' Association have secured permanent quarters at 125 Dearborn street. Mr. J. J. Wade at a recent meeting strongly urged the erection of a $30,000 building, by and for the use of the society, and as this is one of the strongest and best organized of the building associations of the city, the project is feasible as it certainly would be advisable.

Architect John M. Van Osdel, the pioneer architect of Chicago, is now the pioneer in the building of office structures west of the river. The Crary block, which will be six stories in height and will have a frontage on Madison and Canal streets of the best quality of dark red St. Louis pressed brick. The character of this improvement calls for editorial mention.

Architect S. V. Shipman is engaged upon plans for a ten-story office building for Mr. Goff, of Cincinnati, who is represented by W. D. Kerfoot & Co. The lot is 72 by 60, and the building will be built of McArthur red sandstone and pressed and ornamental brick. The lot is occupied by four-story brick buildings, which will be immediately torn down and the work of construction commenced.

Architect S. S. Beman has prepared plans for a massive eleven-story building for Marshall Field, Esq. The lot is 82 by 168 feet, and the structure will be thoroughly fireproofed. Although the prospective visit of the owner to Europe may defer the construction, the probability is that the work will immediately commence. The plans are not yet so far completed as to make a description possible at this date.

Architect Geo. E. Edbrooke is rapidly pushing the work upon the Continental office building for Messrs. Cooper & Carson. It will be nine stories in height, with one hundred feet frontage, and will be constructed as a thorough office building and practically fireproof. The first story is planned for two banking offices, and there will be one hundred and fifty additional offices. The building will be ready for tenants July 1.

The Journeymen Stonecutters' Association have issued a circular notifying owners and architects that hereafter members of the association will not be allowed to work any buildings unless the contract has been taken direct from the architect or owner, the reason given being that the system of sub-contracting, because of the inferior quality of material supplied and of work performed in many cases, is injurious to the reputation of stone as a building material.

Col. J. Mason Loomis has leased a lot on La Salle street, between Jackson and Quincy streets, and proposes, with the coöperation of Mr. Wm. K. Nixon, to form a stock company for the erection of a large office building. The lot is 165 by 60, and will admit of a structure of magnificent proportions. Though the required stock is nearly all taken by well-known capitalists, the company has not yet been incorporated and no architect has been engaged, but this will be done and the work of building commenced at once.

Contractors are considerably interested in the revival of a method of fireproofing which, though practiced years ago in Chicago, has not been pushed with the vigor so apparently important a device should warrant. It is called James John's Plaster and Concrete Fireproofing for Wood Construction, made by an old and reliable Chicago contractor. The method is to apply it in one continuous mass, securing it by nails and heavy galvanized iron to the joists or studding. The claims for it are that it will effectually resist both fire and water, and as it is exceedingly cheap it should be examined by practical men, and, if it is all it claims to be, adopted.

The Building Committee of the Home Insurance Company of New York have been examining the designs of three different architects. They are representative men in the architectural profession, and it will be hard to choose, and when it is done it will be because of the fancy of the committee for some one design rather than because of any weakness in the others. A permit to build was taken out upon the plans of architect W. L. B. Jenney, and that architect has, upon the orders of the company, let the cut stone and other contracts; but while this architect's designs are highly meritorious, and would give to the company a magnificent structure, no design has as yet been accepted.

Architects Burnham & Root have, after holding the plans of the Armour, Kent and Bensley building for a year, commenced letting contracts and will soon begin the excavation for this $1,000,000 office building. Architect Normand S. Patton, who arranged the iron construction of the building for the owners in connection with the architects, is engaged computing quantities, etc., for the ironwork preparatory to the letting of the contract. The Adams office building, by this firm, will be commenced May 1, upon the expiration of the lease of a small building now occupying the lot. The owner is in Europe, but the plans were all prepared last fall and nothing will prevent the commencement of the building at the time stated.

Architects Adler and Sullivan have under way, for Mandel Bros., a stable that is both extensive in architectural design and a model in stable construction. It is 86 by 44 feet, three stories high, and is built of pressed and molded brick and terra-cotta ornamentation. The horses are placed in the second story and the general arrangement is made with special reference to the health and comfort of the stock. The cost will be about $20,000. These architects have also drawn plans for the F. A. Kenedy Co., for a bakery. It will be six stories in height, 82 by 150. The arrangement is such that the flour is mixed on the top floor, and it passes downward from floor to floor in the process of manufacture. The ovens, which are located on the third floor, are six in number and weigh two hundred and forty tons each. This when completed will be one of the most perfect bakeries in the country. The cost will be about $40,000. Among other plans in this office are those for flats for S. Blumenfeld, on Chicago avenue near State, 25 by 80, with stone front and cornice; also a factory for a large manufacturing firm in West Monroe street, 90 by 200 feet, four stories and basement in height, to cost about $50,000; also a dwelling on Michigan avenue, near Thirty-second street, with brownstone front; and plans for numerous other projected buildings, most of which it is too early to give even a brief mention, but indicating an exceedingly busy season for this firm.

Our Illustrations.

Page 27, Courthouse at Marshalltown, Iowa, by architect John C. Cochrane. The building plans have been completed and work will commence as soon as the weather will permit.

Page 21, perspective of Courthouse for Houston county, at Caledonia, Minnesota, now nearing completion, by architects C. G. Maybury & Son, of Winona. It is built of limestone, the outside walls faced with pitch-faced range, and the trimmings are of the same stone, bush-hammered. The cost will be about $35,000.

The Commercial National Bank building, by Architects Jaffray & Scott, Chicago, occupies a lot 90 by 131 feet, corner of Monroe and Dearborn streets. It is six stories and basement in height, the basement being of blue Bedford stone and the remainder of dark red St. Louis pressed brick, with trimmings of Perth Amboy terra-cotta. The first floor will be occupied as a banking-room and will have an exceptionally fine interior, designed by Mr. Scott, whose facility as a designer as well as architect is well known. The remainder of the building is fitted for offices, and the advantages of the locality are such that the offices are almost all rented. The illustration is by Paul C. Lautrup, from the original design of the architects, which has in the construction been slightly altered by the owners.

Page 25, Woodlawn Presbyterian Chapel, Hyde Park, Ill., Harry Lawrie, architect, 54 by 33, hall 40 by 32. This chapel is to be erected at the corner of Sheridan avenue and Sixty-fourth street, Woodlawn. The building comprises a hall, 40 by 32, capable of accommodating about three hundred people. At the end fronting Sheridan avenue are two rooms, which are intended to be used as classrooms, but these, when required, can be thrown into the main body of the chapel by opening folding partitions. Over these two rooms is a gallery extending the whole width of chapel, access to gallery being had by stair in tower. The front and sides will be erected in pleasing combinations of timberwork, shingles being on the front and tower, while in the upper part of front gable plaster and half-timberwork will be employed, giving an old English effect to the exterior. The tower is about sixty-three feet high, and in the upper part a bell chamber is provided. The interior will be plastered and wainscoted, and the roof will have wooden ribs at intervals of about eight feet. It is intended to decorate the interior walls and roof in pleasing tones, and to stain the woodwork to show its natural color. It is expected that operations will be commenced at once, and when the building is completed it will form an attractive and handsome addition to the handsome growing town of Woodlawn, and will be quite in keeping with the many fine residences springing up in that locality. The building committee are Messrs. Chas. Pennington, F. W. Green, J. R. Towle, E. B. Springer; and the trustees are Messrs. Jos. N. Barker, D. K. Home, John A. Cole, E. B. Springer, John Mobin.

The residence just completed for M. D. Wells, Esq., by the architects Wheelock & Clay, is illustrated by two perspectives and several interior views from sketches by Cicero Hine, with the exception of the ballroom, which was drawn from an excellent view of that interior photographed by J. W. Taylor. Mr. Hine has succeeded in giving an admirable illustration of this, one of the finest architectural productions among the residences of Chicago. The basement walls and the front to the second story are composed of Connecticut brownstone, and the remainder of the walls of a beautiful quality of Baltimore brick, trimmed and ornamented with artistically executed terra-cotta from the Northwestern Terra-Cotta Works. The interior of the building is exceptionally well laid out, and the architects have reason to be congratulated upon the production of a residence that is so universally admired. It stands on the southeast corner of Michigan avenue and Twenty-sixth street, and the view given shows two fronts to excellent advantage. The interior is finished in natural woods, manufactured by the interior finishing firm of Tomlinson & Carsley, the designs for which, as well as for the furniture, were made by Luther F. Crosby, who, in conjunction with the decorator, Mr. Abner Crossman, and the tapestry artist who furnished all the tapestries and upholstering, carpets, etc., Mr. G. W. Haskins, united in the work of producing the artistic and harmonious interior. As this is notably a Chicago residence, created by Chicago architects and Chicago workmen, further illustration and description will be made in a future number.

Lumber Notes.

AT the Moffat camps on Hubbard Lake, Mich., 2,500,000 logs have been banked.

RYERSON & HILL have built an addition, 60 by 80, to their mill at Muskegon, Mich.

JONATHAN BOYCE will pile 20,000,000 feet of lumber in Muskegon, Mich., this season.

A SIGHT rarely witnessed may be seen at Averill, Midland county, Mich., a pile of 17,508,850 feet of pine saw logs.

REPRESENTATIVE CUTCHEON, March 10, presented a petition signed by lumbermen, representing $8,000,000 capital, protesting against that portion of the Morrison bill which places lumber on the free list.

A TREE was cut last week in the south part of Lakeview, Montcalm county, Mich., which measured from the roots to the top one hundred and sixty-four feet, and cut five sixteen-feet logs and four twelve-feet logs.

A SUDDEN rise in the Big Sandy river near Catlettsburg, Ky., of five feet has caused disastrous work among the logs awaiting shipment. The steamer Spurlock narrowly escaped destruction by rushing logs. There is no estimate of the extent of the loss.

THE total receipts of forest products at Chicago during the year 1883 aggregate 1,897,815,000 feet of lumber and 1,185,108,000 shingles, to which must be added 65,477,000 lath, and the hardwood, which forms no mean factor in the business of Chicago.

THE majority of the logging camps will push their work as long as favorable weather will permit, even if it runs along into April. The cut of the Eau Claire Lumber Company on the Eau Claire and tributaries will exceed 65,000,000 feet, over 50,000,000 of which have already been banked. Driving supplies and implements are being forwarded, so that everything will be in readiness to commence that part of the work with the first disappearance of ice.

THE following officers and directors were elected by the Chicago Lumberman's Exchange for the ensuing year: President, J. P. Ketcham; vice-president, W. E. Kelly; board of directors, B. L. Anderson, Thaddeus Dean, W. A. Fuller, W. E. Kelly, J. O. Bryant, P. G. Dodge, Addison Ballard, J. P. Ketcham, J. S. Vredenburg, S. K. Martin, John McLaren, T. G. Morris and A C. Soper. The election of a secretary and treasurer was postponed until the next regular meeting.

NEARLY all the lumber mills on the Chippewa river, Wis., are undergoing a thorough overhauling now, and additional machinery is being introduced and every preparation for an increased cut during the coming season is being made. The loggers are virtually through with their season's work now, and are only awaiting moderate weather to break camp. Everything on the main river and tributaries is ready for the drive, which from every indication and prophecy is yet a great ways in the future.

THE Chicago Lumber Company recently purchased of C. N. Nelson & Co., at St. Paul, 18,000,000 feet of lumber, which is probably the largest sale of lumber ever made at one time in this country. The purchase was made by S. H. Fullerton and M. T. Green, and the lumber is for the company's yards in Kansas. Some idea of the amount of lumber can be had by figuring on the cars it will take to move it. Allowing 10,000 feet to each car, it would take a train twelve miles long to carry it, and another mile of engines to pull the train.

Personal and General.

THE address of Paul C. Lautrup, the architectural designer and draughtsman, is 157 Washington street, Chicago.

THOS. L. JOHNSON was confined to his hotel in Chicago for two weeks, suffering from a fractured rib. The injury was sustained in Omaha.

MR. W. C. HALL, vice-president of the Perth-Amboy Terra Cotta Company, visited Chicago, St. Paul, and other western cities, last week.

MR. W. I. AUDSLEY, F.R.I.B.A., of London, Eng., has been visiting Chicago and other western cities. A proposed public building, for which this architect has submitted preliminary sketches, will be described at some future time, should the project become a fact.

MR. H. C. MCLEAN, of the supervising architect's office at Washington, visited the West recently for the purpose of ascertaining the condition of certain public buildings. There is a possibility that the consideration of a report upon this subject may shortly be taken up by congress.

ARCHITECT S. S. BEMAN, who has been known solely as the architect for the Pullman Company, is doing general architectural work, and is engaged upon plans for some of the most important buildings and residences to be erected this season, with headquarters at Pullman's Palace Company's offices.

F. S. ROHAN, ESQ., of the firm of Rohan's Sons, of Cincinnati, was elected vice-president of the Builders' Exchange of that city at their last annual meeting. Mr. Rohan is one of the representative members of the building fraternity in Cincinnati, and it is an indication that the society is becoming influential and conservative, when such men hold the important offices.

ARCHITECT HENRY BEVIS, a highly esteemed citizen and well-known architect, died at his residence in Bond Hill, Cincinnati, March 6. He had been suffering from Bright's disease for some time, but his troubles were aggravated by an attack of pneumonia, which resulted in death. He was about fifty years of age, and had been prominently identified with the building interests of Cincinnati for over twenty years. A few years since he was a candidate for superintendent of the public school buildings, but was defeated by a few votes by Godfrey Ludwig. He was universally respected and acknowledged as a practical and scientific builder and architect.

THE Indianapolis branch of the American Institute of Architects is about to reorganize. There are now nine members, and several more are expected to join. The revival of interest in association matters, which is becoming general among architects in the western cities, is one of the most hopeful indications that architecture is becoming a study as well as a business with the profession, and that a higher plane of professional excellence is desired.

Drawing Instruments.

A DRAUGHTSMAN, writing to a technical journal, makes some pertinent remarks upon the manner in which drawing instruments should be made that are well worth reproducing. In regard to the absurdity of putting unnecessary and awkward ornamentation on drawing instruments, he says:

"Your correspondent, in a recent issue, spoke of numerous angles, projections, etc., on drawing instruments, and thought they should be removed. He is quite right. It seems to be one of the delights of Swiss makers to put them on their tools — the higher the price of the tool, the more angles, etc., you get. Swiss makers residing in this country do the same thing, and others copy from them. These little projections are neither pleasant to the touch, nor cleanly, and they are utterly without use except to run up the expense of the instrument.

"When the perfect American tool is made by Americans, I hope to see an ideal instrument, with, for instance, each leg of the dividers a pretty taper from the stiff joint to the point, with all necessary projections nicely rounded off, and never cut in, as the Swiss make theirs. Another thing which seemed most peculiar to me is the notch about half way down the leg of a pair of good Swiss dividers, cutting the leg about half off, utterly regardless of consequence as to springing. If that thin part is strong enough (for the weakest part represents the strength of a tool) then why not reduce the remaining parts accordingly?

"The nicest tools I have handled were a set of Swiss dividers (pen and pencil), which had been carefully filed down from their former selves, and nicely rounded up on all sides of the leg. The hand could move from one end to the other without encountering any harsh projection, and it was a pleasure to work with them. The matter should be investigated by the manufacturers."

Correspondence.

CHICAGO, February 29, 1884.

To the Editor of the Inland Architect and Builder:

Can I trespass upon a little space in your interesting journal to express a want that I think has been in the minds of most Chicago architects for a long time, but each one, from lack of time or some other cause, is waiting for some one else to take the initiatory step in the direction of supplying that want,—which is an association of architects in this city. We are far behind many less important cities in this respect, and should organize at once a strong, vigorous society of that character, and enroll as its members all worthy Chicago architects. Such a society would be of unlimited benefit to the younger members of the profession, and if the older and more experienced heads will join in the enterprise, and have for their motto "Docendo dicimus," they will be benefited as well as the rest.

The interchange of thought and ideas, and clashing of opinion, is just what we want in the profession for mutual benefit, and to elevate the standard of Chicago architecture. By uniting as before mentioned, we can, at a very small expense, procure rooms and enjoy the benefits of lecture courses, scientific researches, competitive designing, etc. etc., in the interest of our art.

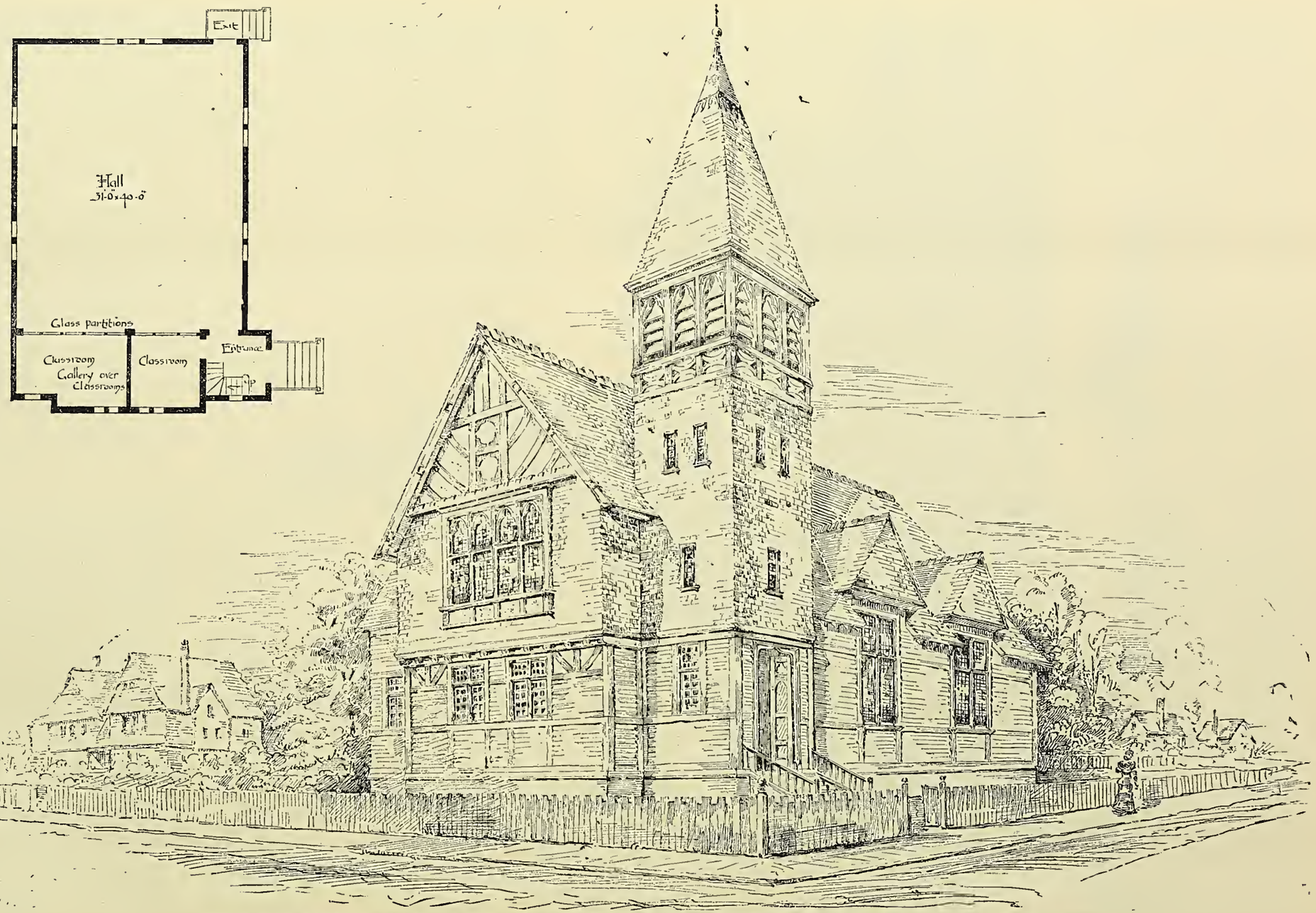
And in looking still farther into the future and possibilities of such an association, I can see it installed in a building of its own (a model of architectural beauty), built by a stock syndicate formed of all the members of the association. When we can rise to this point, and by building the right kind of a building, the association would be more than self-sustaining, and by judicial financial management would pay a fair percentage in dividends to the stockholders besides.

I think THE INLAND ARCHITECT AND BUILDER is the best medium through which the above suggestion may be brought to tangible results; and if it will make the attempt, I feel sure that it will receive support on every hand. Respectfully submitted.

H. R. WILSON, Archt.

We print the above with the hope that something tangible may result therefrom. Architects can rely upon the assistance and coöperation of this journal in the promotion of any measure that has for its object the present or future good of the profession. Our correspondent outlines a course of procedure that seems to be approaching almost a necessity for the profession to follow in Chicago, and we hope for further expression from architects, and earnest thought at least, for the present, if not immediate action.—[ED.

COMMISSIONER CREGIER has let contracts for the carpentry and marble work upon the city hall building. Luddell & Messioner are the lowest bidders, and the accepted contractors for the carpentry, the figure being $74,704, and the Burlington Marble Company supply the marble for $43,000, each contractor furnishing a $25,000 bond that no convict labor shall be used on the work.



WOODLAWN PRESBYTERIAN CHAPEL.—Harry Lawrie, Architect, Chicago.

New Publications.

THE ORNAMENTAL ARTS OF JAPAN. Illustrated with one hundred plates, seventy in colors and gold, with general descriptive text. By GEORGE ASHDOWN AUDSLEY, F.R.I.B.A., etc. New York: CHARLES SCRIBNER & SONS.

This unique and important work on oriental art of which the prospectus has been received, which also exhibits twenty-five of the plates to be included in the work, will be a genuine surprise and a delight to every person interested in art or art portraiture. The American edition will consist of two folio volumes, containing one hundred plates, and will be issued in four parts, inclosed in portfolios, at intervals of about six months. The work will be supplied to subscribers only. For artist's proof copies, which will be printed on Japanese paper, and of which but sixty copies will be printed, the price is $300, and for general copies, of which five hundred will be printed, $150 is the price. As far as the prospectus and the proofsheets can show, this work is exceptionally the richest art work ever placed in the American market, some of the chromo-lithography, which is by the famous M. Lemercier, of Paris, being in advance of anything produced even by this the prince of lithographers. As the purposes of the work are the illustration of the more important branches of the art industries of Japan, the work cannot but be of the highest value, not alone to the lovers of art for art's sake, but to decorators and designers in all branches of art manufacture.

The Art Interchange, of February 14, contains a beautiful design in color — "The Butterfly Fairy." It shows a beautiful cupid being driven through the clouds by a multitude of brilliantly colored butterflies; a very charming design, which is especially adapted to painting upon silk or satin. It would make a beautiful fan mount, or could be used to advantage on a lamp-shade or wall-hanging. Other attractive illustrations are six designs for a fish set, a crab apple design for a panel, and another, from the Royal School of Art Needlework at South Kensington, for sketching on linen. A charming woodland scene is given as a suggestion for crayon work, and another (an artistic marine) as a study for pen-and-ink sketch. A beautiful border design for embroidery, from the Royal School of Art Needlework, at South Kensington, England, is another example of good design. In the "Notes and Queries" department, house decoration, oil, mineral and water-color painting, brass hammering, and kindred art topics, are intelligently discussed. The "Open Questions" — for best answers to which a prize of five dollars is given — deal in this issue with the advisability of opening art galleries to the public on Sundays. A charming plaque design in color, by Walter Satterlee, appeared in the issue of February 28. This issue also contained a beautiful study in black and white of the scarlet African Hibiscus; a design for bellows in brass repousse work; an exquisite picture showing a deer in a winter forest; besides floral designs for tiles, etc. Sample copies of this admirable art journal will be sent upon receipt of 10 cents. Address William Whitlock, 140 Nassau street, New York.

Mosaics.

AN electric lighter for $5 is being sold by the Eastern Electric Mfg. Co., of Boston, Mass.

JAPANESE STAINED GLASS.—A new feature in stained-glass manufacture will be furnished the Tobey Building by Healy & Millet. The contract is an extensive one, calling for an outlay of $1,290.

THE W. H. Wells & Bro. Co. have complete the stained glass and mural windows for an Episcopal church on Grand avenue, St. Louis, at a cost of $8,000, said to be a fine exhibition of stained-glass work.

IN addition to the drainage system and the gasfitting contracts, the Durham House Drainage Co. have taken the contract for the plumbing in the new Pullman Office building, and for West's hotel, at Minneapolis.

THE hardware firm of Jones Stebbins, located in this city since 1859, have removed to 231 State street, where they have materially increased their stock of builders' hardware, and their facilities for supplying the trade at this central location.

IN a recent issue an excellent pneumatic bell for elevators was spoken of, and by mistake the name was incorrect. The Zimdar air-bell is the only air-bell made, and has attracted the attention of builders and architects throughout the country, as it acts wholly by a compression of air and does not require the use of electric batteries, as in other devices.

INFORMATION concerning the property of the Brownell Slate and Flagging Company is given in a pamphlet with that title, sent out by the office of the company at Boston, from which it seems that the extent of the slate quarries of Vermont for the supplying of building slate, and for flagging purposes, is probably only limited by the ability of the company to quarry.

THE patent compressed lead sash-weights are to be used in Pullman's Palace Car Company's Office building. These sash-weights are extra heavy and being center-balanced and adapted to almost any style of casing where ordinary weights are not available, they are fast becoming popular among builders who appreciate a perfect-acting and noiseless weight.

THE Northwestern Terra-Cotta Works are making a new description of terra-cotta that will supersede all others where the face is exposed to water. It is a semi-glaze that prevents the water soaking into it, and gives it a permanent gloss and finish. The works of this company now employ about two hundred and twenty-five men, including some excellent designers.

THE Walworth strong, sensitive automatic sprinkler is a self-acting sprinkler, for use in mills and factories, etc., where a constant supply of water is necessary for the extinguishing of fires. The heat softens a solder ring which confines an automatic cock, and water, from a tank in the roof, is sprinkled in all directions. Messrs. Hay & Prentice are the agents for this excellent device, in Chicago.

MR. J. S. BAST, of this city, having satisfactorily fulfilled his contract with the Cotton Exchange of New Orleans, La., for the entire office fittings, including partitions, desks, tables, chairs, etc., has been favored with a similar order from the Louisiana Sugar Exchange of the same city. Mr. Bast also designed and manufactured the vestibule, doors and partitions in the Louisiana Club building, which is considered one of the finest club houses in New Orleans.

THE firm of S. S. Streator, known as the Globe Ironworks, and among architects credited with the production of some of the best architectural ironwork in use, have recently built and are occupying a large building devoted exclusively to the production of wrought and cast forms in iron, shutters, metallic window sash, the latter being a specialty. Among recent contracts, the ironwork of the Las Vegas, N. M., jail, the State capitol at Indianapolis, the new treasury vaults at Chicago and Philadelphia, and other like contracts for public and private buildings.

WE are informed that among the recent decisions in patent cases was one by the Supreme Court of the United States, in the case of J. A. Fay & Co. *vs.* Cordesman & Egan Co., of Cincinnati, Ohio. It appears suit was brought, about eight years ago, for an alleged infringement of three patents on Band Sawing Machine, and after having been decided in favor of Cordesman & Egan Co., in the lower courts, was appealed to the supreme court, which, we are informed, has just affirmed the opinion of the court below, to the effect that not a single point of either patent has been infringed upon.

T. L. JOHNSON, the representative of Messrs. Keuffel & Esser, of New York, has been remarkably successful in introducing the celebrated excelsior tapes of this firm's manufacture. A representative of THE INLAND ARCHITECT AND BUILDER was present when one of the engineers of a large railway corporation (Mr. Randolph) spoke of these tapes as being the best steel tapes made for engineers' use, volunteering to recommend them in any way required. It is valuable for engineers to know that the Excelsior is thoroughly reliable, and it is pleasant to find them represented by a firm so well known as K. & E., of New York.

THE following circular letter has just been issued by M. Benner & Co., and will be of interest to our readers:

THE BENNER & CO. IRONWORKS.
CHICAGO, March 20, 1884.

Having recently moved to our new and commodious quarters at 260–264 South Jefferson street, we are now prepared to manufacture and furnish structural and ornamental ironwork of every description.

Store fronts, riveted girders, columns, iron doors, railings, sash and gratings, air grates, anchors, iron roofs, jail work, stairways, shutter gates, crestings, verandas, etc. Building anchors of all kinds in stock.

We will continue to make a specialty of the Combination Ice-proof Fire Escape and Stand Pipe, and have just contracted for the sole right to manufacture and control the Cowles' patent fire-proof wire screen shutter; also, we shall make a specialty of soft grey iron castings after May 1. Estimates made on all classes of ironwork.

Yours respectfully,
M. BENNER & CO., 260–264 S. Jefferson Street.

THAT the plumbing and sanitary features of residences and public buildings are becoming of first importance in the public mind and that the manufacturers are fully up to the times in their efforts to supply the demand, no one can doubt who has visited the office on Adams street, opposite the customhouse, recently fitted up by the Myer & Sniffin Co., of New York, as the western office of this house. To begin to describe the decoration of the walls, artistically painted in olives and bronzes, the fittings of cherry, the stained glass and upholstery that harmonizes so perfectly with it, would be beyond the scope of a brief notice; but H. Edgar Hartwell, one of New York's first decorators, has placed a sample of his decorative ability in this office that is of no mean order. The different closets, baths, etc., made by the Myer-Sniffin Co., are exhibited in such shape as to impress the observer with the exceptional facility with which the plumbing of a house may be placed, making it clean and wholesome as any other piece of furniture. As the fitting up of this office cost upward of $8,000, it is not too much to say that it should be inspected not only by the building professions, but citizens generally.

IMPROVED taste in selecting furniture and decorations for public and private buildings, demands something novel, as well as useful and ornamental, in steam radiators for warming the same. The "Bundy radiator" meets these requirements, and excels in its appearance and advantages, without the objectionable features of some radiators that are on the market. The accepted type of a first-class radiator is a vertical tube, return bend radiator, with joints that cannot be affected by unequal expansion and contraction of the tubes. The connections and tubes should be large enough to allow free circulation of steam, and the tubes or loops should be so formed, that a narrow, wide, circular column, triangle or corner radiator could be made so that the circulation would be the same in each loop, and not leave "cold pipes," and have the heating surface evenly distributed over the whole base of the radiator. These are the peculiar features of the "Bundy radiator." Each loop is screwed independently into the base by a two and one-fourth inch connection, making a quick and durable heater with one-third the number of connections required for the same amount of heating surface found in the vertical tube wrought iron radiators, it is claimed. Hundreds of "Bandy radiators" that have been in use for a long time, have been changed into higher or lower radiators, where circumstances required them to be placed in front of low windows, or where it was found necessary to increase the amount of heating surface of low radiators, by simply removing the loops and substituting longer or shorter ones as the occasion required, thereby saving largely in the expense and trouble of making the change. It is frequently the case that a change in the heights of radiators is found necessary by the architect of a building, after the radiators are made, and the facility with which it can be done with the "Bundy radiator," is a very important matter to owner, architect or steam-fitter. These radiators can be taken apart to be shipped and rebuilt at building, or for export, or for repairs. The manufacturers of these radiators do not take contracts for steam heating, but furnish them to the trade only throughout this country and for export, so that every reliable steam heating concern can get them at the lowest market price, and any architect can specify them, knowing that a fair competition of bids can be made for the steam heating. Full descriptive catalogues can be had of leading steam heating contractors, or of the A. A. Griffing Iron Co., Jersey City, New Jersey.



COURTHOUSE AT MARSHALLTOWN, IOWA.—J. C. Cochrane, Architect, Chicago.

Inventive Genius in Building.

292,505. Chimney-top. Nicolai Petersen, Chicago, Ill.
292,574. Hinge. William Patterson, San Francisco, Cal.
292,650. Shading-Pencil. George Baptiste Hecklinger, Streator, Ill.
292,670. Sash-holder. Wm. A. McDonald, Minneapolis, Minn.
292,686. Elevator Stop Mechanism. Frank Scooneas, Detroit, Mich.
292,738. Skylight. John Ehrhardt, St. Louis, Mo.
292,887. Tile or Block for finishing inside walls. Jas. Austin, Detroit, Mich.
292,918. Water-closet. John Kelly, Chicago, Ill.
293,028. Ventilated Show-window, Samuel E. Hyndman, Cincinnati, O.
293,038. Elevator. August Kieckhefer, Milwaukee, Wis.
293,043. Draught-Regulator for pipes, flues and ventilators. Louis Young Lenhart, Red Wing, Minn.
293,058. Screw-clamp. Frank A. Moore, Louisville, Ky.
293,097. Dove-tailing machine. John Schmidt, Burlington, Iowa.
293,099. Window sash. Wm. A. Sinsel, Waukesha, Wis.
293,100. Sash-cord Fastener. Wm. A. Sinsel, Waukesha, Wis.
293,175. Pipe-wrench. Jas. Jewell, Grandville, Mich.
293,248. Combined Lock and Latch. Anderson D. Holland, Newport, Ark.
293,262. Apparatus for Heating and Ventilating buildings. James H. Manny, Chicago, Ill.
293,305. Attachment for Water-closets. Luther H. Burnett, Chicago, Ill.
293,385. Weather-strip. David Warnock, Olathe, Kan.
293,413. Weather-strip. Gustav Burkhardt, Homer, Ill.
293,473. Tile machine. Philip Henry Kells, Adrian, Mich.
293,497. Rule and Try-Square. Wiley N. Nash, Starkville, Miss.
293,527. Window-sash. Henry W. Schroder, Springfield, O.
293,554. Sash-cord Fastener. Henry L. Blodgett, Chicago, Ill.
293,596. Brick machine. Robert N. Ross, St. Louis, Mo.
293,598. Door-hanger. Joseph E. Schmid, Buffalo, N. Y.
293,612. Lightning-Diffuser. Leonidas G. Woolley, Indianapolis, Ind.
293,617. Protecting Buildings from Vermin, Fire, etc. Frederick W. Bartlett, Buffalo, N. Y.
293,627. Fire-Escape. Spencer D. Butler, Marshfield, Ore.
293,645. File-Holder. Wm. H. Foster, Jeffersonville, Ind.
293,647. Machinist's Tool. Fred. I. Getty and Frederick Dickinson, Geneva, O.

Synopsis of Building News.

Aurora, Ill.—The outlook is fair, principally for moderate sized dwellings and tenements.

Architect J. Mulvey: For A. Somarindyck, two-stories and basement store, brick, tin roof, 22 by 67 feet, to cost $5,000; projected. Addition to library building, one-story and basement, stone, shingle roof, 44 by 44 feet, to cost $4,000; projected. For J. C. Hanna, two-story dwelling, wood, shingle roof, 34 by 48 feet, to cost $4,000; under way. For George Hanna, two-story dwelling, wood, shingle roof, 34 by 58 feet, to cost $4,500; plans finished. For D. A. Town, Earlville, Ill., two-story dwelling, wood, shingle roof, 42 by 60 feet, to cost $6,000; under contract, Thomas & Hugh, contractors, Ottawa, Ill.

Belleville, Ill.—The Eureka Glass Company, which was recently incorporated, with a capital stock of $25,000, has purchased four acres of land in the West End, upon which it is proposed to erect a factory. The work will be commenced as soon as the weather will permit. C. H. Billings, L. Candee and F. W. Putnam are the principal stockholders.

Burlington, Ia.—The outlook for building is favorable, and with good weather and an early spring it will be very good along the river towns.

Architect C. A. Dunham: For John Burnham, flaxseed wareroom, 35 by 50 feet, to cost $4,000; under way. For P. A. Andre, store, double point, three stories, 39 by 28 and 100 feet, to cost $25,000; under way. For S. B. Little, frame residence, to cost $5,000; underway; S. B. Robbins, builder. For Wm. Selles, brick residence, to cost $10,000; being let. For John Bloal, Jr., brick dwelling, to cost $4,500; being let. For W. C. McArthur, frame cottage, to cost $2,500; being let. For Mr. Chittenden, brick dwelling-house, to cost $7,000; E. F. Evans, builder. Brick schoolhouse, at Leffler station, to cost $5,000; being let. For C. S. Pond, Keokuk, Ia., frame dwelling, to cost $7,000; being let. For J. T. Perkins, Keokuk, Ia., frame dwelling, to cost $4,500; Robert Burns, builder. For C. B. Finch, Kearney, Neb., frame dwelling, to cost $8,000; being let. For C. H. Farnsworth, Albert Lea, Minn., frame dwelling, to cost $3,500; being let. For B. D. Harper, Greely, Col., brick dwelling, to cost $7,000; being let. Episcopal church, this city, 40 by 62 feet, to cost $12,000; Baptist church, ditto, 61 by 85 feet, to cost $20,000; being let; M. E. church, ditto, 100 by 140 feet, to cost $70,000; plans in preparation. For L. D. Sheppard, Keokuk, Ia., frame dwelling, to cost $6,000; partly enclosed; Robert Burns, builder. For A. H. Evans, ditto, frame dwelling, to cost $6,500; partly enclosed; Robt. Burns, builder. All the foregoing mentioned buildings architect Dunham has had since January 1, 1884, except the two last named.

Cedar Rapids, Ia.—One of the most important enterprises which will inaugurate the spring work is the Masonic library building. The foundation is in. The plans, prepared by architects Foster & Leibbe, are now ready for the contractors. The building will be put up with front and rear parts. The front part will be two full stories with basement, and is to be ornamented with a handsome tower. The rear will be a plain building, also two stories high. The basement of the front part will be used for storage purposes. On the first floor will he the reception room, packing room, elevators, closets and halls. On the second floor will be suites of rooms for the Grand Master and Grand Secretary. This part is to be built of brick and stone, and is to be 40 by 41 feet in size. The library building will be 30 by 58 feet on the inside. The shelves will be arranged about as they are in the State library, and there will be room for 25,000 volumes. The second floor will be used for an art gallery and museum until it is needed for the library. It can be arranged to hold the same as the first floor, which would make the capacity of the building 50,000 volumes. The library will be made fireproof, and the whole building will be first-class. The contracts were let on the 20th inst., but too late for insertion in this issue.

Chicago, Ill.—From every point of view the building outlook in Chicago during the ensuing season bids fair to largely exceed that of any year since the fire of 1871. The building department of the city government reports that at no previous time in the history of the city was there such immense sums of money going into the stupendous business structures in one season. As an enthusiastic but conservative contemporary puts it:

"All these things point anew to the marvelous growth and prosperity of this wonderful western metropolis. Millions are going into the improvement of real estate, millions more into the expansion and development of the city's commerce, and untold millions more are ready to leap into the business vortex as the occasion offers and the need demands. It is no hazardous prediction to make that in 1890 the census will give Chicago 1,000,000 of inhabitants and a property valuation away up in the billions. And this will be the creation of little more than half a century. Was the like of it ever seen before in the world's history?"

In the interval since our last issue, something more than a mere ripple of excitement was caused in all business circles by the county board making a contract with a firm, composed in part of local politicians, granting them permission to rummage the records of Cook county for the purpose of hunting up all the intangible evidences of value they could find, and having the owners thereof heavily taxed thereon. According to the arrangement made, the tax-hunters were to get twenty per cent of all that might be collected. The result of this was that the county would get nothing from these taxes. Out of a tax of $5 on the $100 the city would get about $3.50, the county about 80 cents, and the remainder go to the state, the town and the parks. On every $5 collected, therefore, the county would pay $1 to the collecting firm and have nothing left for itself, the 80 cents to which it ordinarily would be entitled having been turned over to the tax-hunter. The scheme, which so strongly partook of a blackmailing character, raised a storm of indignation; the press at once took it up and showed that its effect on the prosperity of the city, present and future, would fall like a blight, drive away capital, produce stagnation, dwarf business, and stop the rapidly expanding growth of the city; and so great was the clamor raised, that the county board felt compelled to rescind its action, and the matter now rests with the judiciary committee of the board. It is safe to say that the scheme, so full of seeming iniquity, has received its quietus. In regard to the large number of building permits which have been issued during the past two or three weeks for lofty business structures, some of these have been accelerated by the contemplated action of the council to compel the owners of all lofty buildings to make them absolutely fire-proof or to restrict their height. Be this as it may, the buildings of this character already put up have been built in the best possible manner, and as nearly fire-proof as possible. All the architects are extremely busy, and where they speak of one building that can be published, they have at least four or five on the boards about which they can tell nothing. The indications point to the building of fewer flats this season, and a much larger number than heretofore of small houses. The large number of lofty and costly business blocks, however, which will be put under way by the 1st of May have not only attracted wide attention but have excited both surprise and admiration. As an individual enterprise, Mr. Marshall Field is to erect on the vacant lot, southwest corner of Monroe and La Salle streets an eleven-story building, to cost $400,000. S. S. Beman is the architect. The Gaff building, S. V. Shipman, architect, is to be ten stories and to cost $100,000. Three leading architects have submitted plans for a $200,000 building for the Home Insurance Company. The Armour, Kent & Bensley building, plans for which were drawn by architects Burnham & Root a year ago, to be built in the immediate vicinity of the new Board of Trade building, to be eleven stories high, and will cost, when completed, $1,000,000, will be immediately commenced. The building to be built as soon as a stock company is formed by Mr. W. K. Nixon, upon a lot recently leased by J. Mason Loomis, will be pushed rapidly, the proposed cost being about $200,000. The Continental building, adjoining the Continental building on Dearborn street, near Monroe, is to be nine stories high. Mr. Geo. E. Edbrooke is the architect for Messrs. Cooper & Carson, the owners; it will cost $200,000. The foundations of this building are now being laid. Another fine building, of which Messrs. Burnham & Root are the architects, is the John Quincy Adams ten-story office-building, 116 and 118 Dearborn street, to cost $135,000. Messrs. Cobb & Frost are the architects of the new opera house to take the place of the unsightly Exchange Building on the southwest corner of Washington and Clark streets. This structure will be nine stories in height, and cost $500,000. Work will probably commence on this building some time in May, though the question of tearing down the old building is not yet settled. The Crary building, J. M. Van Osdell, architect, is to be another fine improvement. All the above buildings will be carried forward at an early day, as far as can be foreseen at the present time, while a proposed building for the Imperial Insurance Company of London is one of the possibilities. McNeill office-building, plans for which have been prepared by architect York, but are as yet in an embryo state, are but rumors as far as the element of news is concerned. Of the above stupendous structures nine have been definitely determined upon, and cost in the aggregate the sum of $2,935,000. All these buildings are to be erected in the business center of the city. The wand of the magician, or the spell of a talisman, ne'er effected changes like these; nay, even Aladdin's lamp never performed greater wonders. There is no place in this land—no other city on this continent—where such a record can be made. There is no other place in this broad land where trade has increased in like proportion. What has produced this great prosperity? We answer, the great natural advantages of Chicago and the untiring enterprise of its citizens. Its situation is unsurpassed by any in the land.

Architects Cobb & Frost have plans about ready (with some finished) for several handsome suburban residences. A summer house for Mr. Geo. C. Walker, at Geneva Lake, Wis., now approaching completion, is 60 by 100 feet, basement and three stories. The basement is constructed of rough lake bowlders, and the superstructure is entirely of shingles. The house has a broad piazza on three sides, and on the southwest corner is a projecting bay, with a piazza following its line, commanding a splendid view of the entire lake. The lower part of the house is most conveniently arranged and the upper part is divided into numerous spacious chambers, with the view of enabling Mr. Walker to entertain many friends in the style he desires. Also a house for Mr. F. O. Lyman, at Winnetka, which will also be upon a bluff overlooking the lake. It will be basement and three stories high, and will be simple but attractive in design. It will set low in the ground, and will have a very low roof running around. The parlor, dining-room, kitchen, hall, and library will be on the first floor, and a number of bedrooms above. This house will also be finished in the spring. Also a house soon to be erected for Mr. Arthur Orr, Jr., at Evanston. It will be 40 by 70 feet, with a basement of brick and a superstructure of shingles. It will have an odd, attractive hall, with a large, cozy inglewood, taking in a square bay in the southeast corner, cut off from the hall by a stairway. The rest of the interior arrangement will be unusually convenient and comfortable. Also the same firm are about to build a picturesque country-house at Kenwood for Mr. C. V. Marsh. It will be 25 by 60 feet, three stories high, and the entire exterior finish from top to bottom will be shingles. Messrs. Cobb & Frost will also build at Kenwood two houses for Mr. O. W. Potter. They will be each 30 by 60 feet, three stories high, and will have Anderson pressed brick fronts. The exterior and interior finish will be similar, and will form a pretty group. One of the handsomest sets of designs these architects now have in hand is for a country-place at Sodus Point, Lake Erie, near Rochester, for a New Yorker. Especial attention has been paid to the laying out of all the buildings with an eye to the general effect of the group, which will consist of a house, a barn, a porter's lodge, a boat, billiard and bowling house, and an ornamental windmill high up on a hill. These buildings will all be finished this spring.

Architects Burnham & Root have made plans for a residence for Mr. J. H. Pearson, on Adams street, near Laflin, and also for a residence for Mr. Turner at Oak Park.

Architects Holabird & Roach: For Ravenswood Historical Society, a two-story brick, 40 by 60 feet, to cost $5,500; projected. One-story frame station at Belle Plaine, Ill., 30 by 50 feet, to cost $2,000; under way. For R. H. Taggart, a three-story flat on Drexel Boulevard, Louisville brick, pressed front, 30 by 57 feet, to cost $8,000; under construction. For Wm. O'Brien, three stories, flats, pressed brick front, 24 by 82 feet, to cost $7,000; under way.

Architect Holberg is preparing some elaborate plans for an alteration of the Brunswick and Balke billiard hall, on Washington street. The present gallery will be taken out, and the bar-room will be placed in the basement, through which the entrance to the billiard hall will be arranged. The decorations on the walls will be especially fine. Ten thousand dollars is to be expended upon it. Mr. Holberg is also engaged on plans for a three-story store and dwelling building, 44 by 90, with eight rooms on each floor, for J. H. Smith. The cost will be $18,000, and the material pressed brick and brownstone. The same architect is building for himself two houses on La Salle avenue, just above North, to cost $10,000 each.

Architects Treat & Foltz have prepared plans for a large block of apartment buildings on Van Buren street, near Aberdeen, with stores on the ground floor. The flats will occupy two floors above, and be divided into six and eight rooms. The fronts will be of pressed brick and terra-cotta. The buildings will be constructed for Dr. Matthaei and Messrs. Peterson and Sonne, at a cost of $35,000, and will be 140 by 80 feet. The same architects have drawn plans for a palatial brown-stone front dwelling for W. J. Watson, to be erected on the corner of Prairie avenue and Twenty-third street, at a cost of $25,000. It will he in a modified Norman style of architecture They have also drawn plans for a factory for Messrs. Schneider & Co., 120 by 115 feet, and two stories in height, to be erected at the corner of Twenty-fourth place and McGregor street, at a cost of $25,000. The same firm will build a four-story store and flat building for E. G. Raymond, at No. 344 State street. It will be 25 by 95 feet and the second story will be arranged for a store. The front will be of pressed brick.

Architect Rehwoldt has made plans for a four-story and basement store and flat building, for Messrs. McLain & Cook, to be erected on Dearborn street, near Harrison. The structure will be 40 by 90 feet, and will have a front of Chicago pressed brick.

The estate of E. O. Hubbard will erect two dwelling-houses on Elm street, at a cost of $15,000. They will be three stories in height, with basements, and 25 by 80 feet in dimensions. Pressed brick and terra-cotta will be used for the front elevations.

Architect H. O. Hanson has ready the drawings for five eight-room houses, to be erected at the corner of Wells and Hill streets, for Mr. Hallmeyer. They will be of Anderson pressed brick and brownstone.

Tom Mackin, owner of the Revere House, at the corner of Clark and Michigan streets, has plans from architect Carroll for two new stories, to be placed on that building. The material will be tile, iron and slate, so as to make the new addition as light and fireproof as possible. The two new floors will give one hundred more rooms.

Architect John W. Ackerman has under consideration for Dr. T. S. Bidwell and A. M. Evans, four residences, 63 by 75 feet, two stories, cellar and attic, stone trimmings, Anderson pressed brick, West Congress, near Loomis street, to cost $20,000; under way; Joseph Kavanaugh, builder. For J. O'Brien, stone front residence, two stories and cellar, 25 by 65 feet, West Congress near Laflin, to cost $6,300; Pfister & Mastersor, builders. For Lorenz Franz, store building, three stories and basement, stone trimmings, 23 by 73 feet, to cost $7,500; under way; Gutrick Bros., builders. For Geo. H. Ackermann, double store building, 50 by 60 feet, two stories, Anderson pressed brick, stone trimmings, cor. Polk and Western avenues, to cost 9,000; under way; J. B. McKay, builder. For Fred. Emmerick, double store building, three stories and basement, Archer avenue and Logan street, 39 by 100 feet; under way; Joseph Kavanagh, builder. For Charles Follansbee, carriage factory, three stories and basement, 50 by 80 feet, cor. State and twentieth streets; under way; John M. Dumphy, builder. For John O'Callaghan, store building, three stories and basement, stone trimmings, 23 by 60 feet, Chicago ave., near Market, to cost $7,000; projected. For D. W. Eldred, two residences, three stories and

cellar, slate and mansard roof, cut stone trimmings and Anderson pressed brick, 50 by 42 feet, southwest cor. Pine and Ohio, to cost $10,000; projected. For Rev. Chas. Elliot, D.D., two residences, two stories and cellar, McArthur brownstone trimmings, 40 by 53 feet, cor. Belden ave. and Orchard street, to cost $9,000; projected. For J. Richter, residence, three stories and cellar, pressed brick, stone trimmings, 24 by 64 feet, 47 Granger street, to cost $7,000.

Architect J. H. Huber: For S. A. McDonald, two-story residence, 16 by 39 feet, to cost $3,500; also two residences, 17 by 70 feet, each two stories and attic, front of Wyoming Valley bluestone, galvanized iron dormer windows and red slate roof, to cost $15,000; also residence, 13 by 39 feet, two stories and basement, Indiana pressed brick, to cost $4,000; cor. State and Chestnut streets; owner, Mr. R. Flink; also freight house, 70 by 100 feet, for Robert Law, one-story brick, to cost $3,000; also for Mr. B. Webber, at Ravenswood, cottage residence, to cost $2,200; also cottage for Max Fechon, at Lake View, to cost $1,500.

Architect L. G. Halberg: Plans for residence, 30 by 52 feet, two-story, attic and basement, Indiana pressed brick, with rock-faced brownstone trimmings, double verandah and corrugated tower, on Belmont avenue, to cost $7,000; also plans for a good store and flat building for Mr. J. H. Smith, to be erected on the cor. of Wells and Elm. The structure will be 44 by 90 feet, three stories in height, and will have a pressed-brick front and side. The building will be divided up into two stores and four flats, the latter having eight rooms each. They will have pilaster trimmings, and will be otherwise well finished. Complete, the building will cost $15,000.

Architect G. P. Randall: Plans for a brick schoolhouse, 64 by 55 feet, two stories, at Marion, O., to cost about $15,000; also a three-room frame schoolhouse at Cresswell, Mich., to cost about $8,000.

Architect Fred Kettenich: For Mrs. Wm. Klinger's three-story and basement residence, basement rubble and cement floor, 22½ by 64 feet, to cost $7,500; under way. For Mrs. C. Miller, three stories and basement for store, 25 by 75 feet, to cost $6,000; under way. For Mrs. A. Fuehlke, two-story and basement store, 22 by 60 feet, to cost $4,200; under way. For C. Ambruster, three flats of brick, with barn 22 by 62 feet, to cost $6,600; under way. For F. Barges, a two-story and basement brick store, 22 by 75 feet, to cost $4,400; under way. For C. Caija, three houses, each three stories high and basement, of brick, 24 by 75 feet, to cost $13,500; projected. For Fred Gieck, a three-story brick residence, 22 by 30 feet, to cost $5,500. For C. Lohencrese, a three-story brick and attic, 23 by 65 feet, to cost $10,500; projected. For Mrs. Bird, two-story brick and basement, 22 by 35 feet, to cost 2,200; projected. For P. Hegham, two flats and attic, frame building, 22 by 60 feet, to cost $2,400; projected. For A. Weber, two stores, 22 by 50 feet, to cost $4,000; under way. For H. Felsmann, double house, two stories and basement, brick, 40 by 45 feet, to cost $6,500; projected. For Jacob Linian, two-story and basement brick (an addition building), 22 by 32 feet, to cost $2,500; under way. For F. Halpuah, three-story and attic, brick, 25 by 66 feet, to cost $11,500; under way. For C. Caija, for stores and hall, 48 by 110 feet, to cost $15,000; projected. For A. Church, large brick hall, 60 by 135 fee , to cost $24,000; projected.

Mr. Robert Parker, contractor, is building for himself a double residence at 3747 and 3749 Lake avenue, of brick, two stories and basement, 40 by 52 feet. It will be in Eastlake style, to cost about $9,000.

Architect G. S. Spohr is building an elegant frame house at Bloomington, Ill., for Geo. McIntosh, two stories with basement and attic, 38 by 60 feet, to cost $15,000. The hall will be finished in oak, windows of stained glass, and the entire building will be heated by steam. Also at La Grange, Ill., for P. G. Johnson, frame house, 30 by 50 feet, two stories and basement, Gothic roof, Queen Anne style, the whole to be heated by steam, to cost $4,000. Also, three-story and attic house on Wells and Oak streets, of Anderson pressed brick, front of stone with terra cotta trimmings, 27 by 70 feet, to cost $8,000.

Architect H. R. Wilson: For Geo. W. Parke, brick and stone combination, two stories and cellar, 20 by 45 feet, to cost $5,000; under way. Geo. Lehman & Co., builders: For W. H. Hafner, a stone and brick building, three stories, 22 by 40 feet, to cost $6,000; projected. For Sam'l Burroughs, a stone and brick building, two stories and cellar, to include four houses, 25 by 50 feet each, to cost $16,000; projected. For W. H. Durant, a stone and brick building, three stories and cellar, to cost $5,000; under way; daywork.

Architects Edbrooke & Burnham: For A. Leonard, Mount Leonard, Mo., fine brick residence, 45 by 45, two stories and cellar, with high roof, Elizabethan architecture with rich and ornate detail; plans just completed; cost $20,000. For C. W. Pierce, two semi-detached villas, 40 by 50, frame, two stories and cellar, on Prairie ave., near forty-second street, Hyde Park; plans just completed; cost $6,000. For Mrs. L. A. Herrick, fine pressed-brick residence, 30 by 76, trimmed with brownstone, Renaissance style; plans being perfected; cost $15,000. For Jas. S. Kirk & Co., addition, 108 by 130, to their extensive establishment on North Water street; also machinery and boiler house, 60 by 108; contracts let and work commenced; Thomas Nicholson, mason, Alexander White, carpenter; cost $80,000. For C. H. Nix, hotel at Ft. Wayne, Ind., five stories and basement, 125 by 150. 150 rooms and all modern improvements; plans being completed; cost $150,000. For Gibbs & Caulkins, two frame cottages, 20 by 48 each, on Michigan ave., near Sixty-third street; plans being completed; cost $5,000. For Oriental Consistory (Masonic), in American Express building, hall, parlors, and quarters in general, in oriental detail and decoration; cost $10,000; decorations by P. Almini. For W. J. Edbrooke, residence, three stories and cellar, 25 by 60, cost $8,000. Capital building for State of Georgia, three stories and basement, 350 by 260, exterior cut-stone, fire-proof, will be ready for estimates about May 1; cost $1,000,000.

Cincinnati, O.—Outlook for trade is good, but the season is behind on account of the weather. Architect D. S. Schureman informs us that all his work is let separate to the contractors of the different branches, but under his personal supervision.

Architect D. S. Schureman: For Mosler Bros. Safe & Lock Co., a four-story brick, canvas roof, 43 by 120 feet, to cost $8,500. For Street & Schmidt, furniture, a four-story brick, asphalt roof, 60 by 107 feet, to cost $14,000. For C. R. Mabley & Co., a four-story brick, iron and stone building, tin roof, 66 by 90 feet, to cost $29,000. For Commercial Gazette Co., remodeling, five stories, brick, stone and iron, 48 by 120 feet, to cost $10,000. All the foregoing are under way, and let direct to sub-contractors. For Marcey & Knoblaugh, a five-story and basement, iron and brick building, stone basement, 100 by 150 feet, to cost $27,000; projected. For Mathew Dugen, dwelling-house, two and a half stories, brick, limestone ashler, 27 by 70 feet, to cost $7,000; under way. For Tanner's Offal Co., factory for making glue, drying hair, etc., one, two and three stories, stables, office, etc., tin roof, area about 70 by 200 feet, to cost about $11,000; about completed, except stable. These five are let to sub-contractors. For D. W. Miller Carriage Co., three-story and basement stone and brick building, with gravel and glass roof, irregular area of about 166 by 210 feet, to cost $37,000. This building is about completed, and has an elevator 14 by 14 feet, and the handsomest office in the city. All of the above work, except the two about complete, Mr. Schureman has made the drawings for since January 1, and the contracts are let for all but one, and that will be done during the present month. In addition to these, he is making sketches for work aggregating $150,000, which it is not definitely settled who will do, including a Baptist church, to cost $40,000, and a system of flats estimated to cost $50,300.

Architect George W. Rapp reports the building prospect for 1884 promises fully as much if not more than that of 1883, and the following work: For Rheinbold, two two and a half story frame dwellings, to be erected on Lyons street, Corryville, O., 35 by 57 feet each, to cost $4,250 each; projected; also, for same party, same place and street, two two and a half story dwellings, 35 by 57 feet, to cost $4,700. For Dr. Schmuck, remodeling brick building on Main street, near Canal, to cost $6,100. For Cincinnati Stamping Co., altering their factory, Pearl and Lawrence streets, $2,000. For M. Meister, remodeling residence, to cost $2,000.

Cleveland, O.—Architect C. H. Griese has now in course of erection a large brick church, with Berea stone trimmings, basement of church of Berea stone, at Greensburg, Pa., to cost, when completed, $32,000; also, a brick church at Arlington, O., with Berea stone trimmings, to cost, when completed, $12,000; also, a handsome pressed brick church at Brooklyn, N. Y., with stone trimmings, to cost, when completed, $4,000. Bids opened for a fine brick church with Berea stone trimmings, at Erie, Pa. Basement of Berea stone, rock-faced work. Mr. Griese is now making plans for a large brick structure at Greenville, Pa., with Berea sandstone trimmings, 47 by 78 feet, basement and three stories, for the Thiel college, to cost $22,000; also, a frame dwelling in Cleveland, to cost $3,000; a handsome stone dwelling on Euclid avenue, to cost $20,000, with a barn for same, to cost $3,000; also, at Euclid, O., a wine cellar, 24 by 100 feet, all stone, to cost $6,000; also, twenty double dwellings of pressed brick, with marble trimmings, at Pittsburgh, Pa., to cost, each, $8,000.

Detroit, Mich.—Architect E. E. Myers sends us a photograph of the new city hall to be built at Richmond Va., and of which he is the architect. The building is a handsome and imposing structure, to be built of Virginia granite, rock face. It will be three stories in height, with mansard roof, entirely fire-proof, and will cost, when completed, $300,000. The size of the building on ground, 140 by 180 feet. The same architect is also handling the following buildings, most of which are in course of construction, and for some the plans are just being finished: Plan for new court-house at Omaha, Neb., entirely fire-proof, and to cost $200,000; new court-house at Tiffin, O., to cost $175,000; Harper Hospital, Detroit, to cost $100,000; new church at Jacksonville, to cost $30,000; two stores and Odd-Fellows' hall, Manchester, Ind., to cost $40,000, besides many other smaller enterprises in different parts of the country. Mr. Myers, perhaps many of our readers will remember, is the architect of the new and costly state capitol building now in process of erection at Austin, Texas, of which Col. Abner Taylor, of this city, is the contractor.

Architects Hess & Raseman have plans for a block of four stores, 80 by 80 feet, two stories high, for Mr. Wm. E. Warriner, on Woodward ave., to cost $15,000.

Architects Spier & Rohns have plans for a residence for Barnard Stroh, on Elizabeth street, near Hastings. The Polish Catholic congregation will erect a church on St. Aubin avenue, to cost $62,000. Work will be commenced immediately. The board of education has decided to build a schoolhouse on the south side of German street, between Dubois and Chene streets. The structure will be of brick, 66 by 38, two stories high, and is to cost $12,000.

Architect A. C. Varney: The prospects are very fair for spring work. For Antoine Moruse, a double brick dwelling, three stories, and two barns, the former 40 by 70 feet, to cost $15,000. For Mr. Deshotel, two double, frame houses, two stories, 35 by 70 feet, to cost $10,000. For Charles Swartz, one double frame house, two stories, to cost $2,500. For Lewis Jones, two-story brick dwelling, to cost $4,000. For John Waterfall & Son, two brick houses, three stories each, to cost $10,000. For Benjamin Johnson, two-story brick house, to cost $2,000. For Mr. Slayton, Tecumseh, Mich., two-story frame house, to cost $3,500. The last two are under way.

Architect Peter Dederichs has completed the plans of the new St. Mary's Church. He has drawn plans for the following new buildings: A brick store to be erected by Joseph Henkee, corner of Hastings and Lafayette streets. A brick rectory for the Church of the Sacred Heart, corner of Grove and Prospect streets. Two frame dwellings for August Immel, to be built near the corner of Riopelle and Croghan streets. Frame dwelling for Wm. Lorman, to be erected on Elmwood avenue. A parochial residence for St. Peter's German Lutheran church, corner of Chene and Pierce streets. A rectory for the Catholic Church in Marshall. New Catholic Church in Appleton, Wis., for the Capuchins. Plans have also been drawn by him for a brick addition to Karrer Bros.' store, corner of Monroe avenue and Bates street, which will be raised another story and otherwise improved.

Duluth, Minn.—The citizens of the "Zenith City" rejoice that the house committee on public buildings and grounds have agreed to recommend the erection there of a public building to cost $100,000.

Frankfort, Ind.—The present outlook is not so favorable as it was a month since.

Architect J. W. Hammond: For J. H. Paris, three-story pressed brick and terra-cotta store building, 23 by 132 feet, to cost $10,000; under way; sub-contracts. For Robert Wallace, two-story frame dwelling, to cost $3,000; preparing plans. For Dr. Wilson, two-story frame dwelling, to cost $3,100.

Goshen, Ind.—The building interest of Goshen will not be so great the coming season as it was last year.

Architect J. N. Jones reports a two-story brick shop, 50 by 100 feet, for Nash, Knox & Hubble, for shop purposes. Scott, Stutzman & McDonald are fitting up a factory with new machinery, etc. Of dwelling-houses there are but few in prospect, and they are small.

Indianapolis, Ind.—The weather being so wintry, it is difficult to predict the building outlook, but it is safe to say that not as much building will be done this year as last.

Architect C. A. Wallingford informs us that bids for the new Indiana hospitals at Richmond and Evansville will be received at the Governor's office until April 8, and later on for two more. The city hall commissioners have five plans under consideration for a building to cost $150,000, and bids will shortly be received on it. A new high school to cost about $60,000 is now ready for letting. The board of school commissioners have it in charge. A new workhouse to cost about $40,000 is nearly ready for letting. The city hospital addition of $30,000 is under way. The state-house will be ready for roofing at the close of the present season. The plumbers and gasfitters have formed a society, and are holding well together. The Indiana Chapter of American Institute of Architects will soon organize. It has already nine members, and will shortly have several more. The Encaustic Tile Works are doing well, having about doubled their capacity each year for four years past. Our terra-cotta works are only nine months in operation, and are compelled to double their capacity. The standard of workmanship in all branches of mechanics is being gradually brought up to a higher degree of perfection.

Kansas City, Mo.—Continued cold weather retards building, but the outlook is decidedly encouraging, more especially of improved architectural pretensions. Architect T. R. Tinsley has several fine examples in his office for this season, but the owners prefer to keep their location and nature to themselves until a start is made.

Architect T. R. Tinsley: For Col. R. H. Hunt, three-story triple brick tenement, 70 by 140 feet, to cost $13,000; foundation in and each class of work contracted separately. For John Hughes, a two-story fine brick and cut stone residence, 75 by 24 feet, to cost $9,000; brickwork commenced; builders, Lynch & Hauley. For Dr. Geo. Halley, two-story modern brick dwelling, 60 by 40 feet, to cost $8,000; foundations laid up; F. Oberdorf, stonework; Hughes & Dugan, cut-stone: rest not contracted yet. For Col. R. H. Hunt, three-story double brick tenement, 46 by 40 feet, to cost $8,000; foundations in; balance contracted separately. For Diocese of St. Joseph and Kansas City Cathedral, brick and stone, 72 by 170 feet, to cost $100,000; plastering and inside finish yet to be done; each class of work let separately. For John Hughes, two-story modern brick and stone residence, 75 by 24 feet, to cost $9,500; foundations in; contractors, Lynch and Hauley. For L. O. Cady, three-story brick tenement, 50 by 44 feet, to cost $10,000; foundations not completed; builder John Sutherland, builder by the day. For "Capitalist," three-story row of flats, 70 by 40 feet, to cost $8,500; projected. Also for same, a three-story row of flats, 110 by 40 feet, to cost $12,000; also projected. For Col. R. H. Hunt, a two-story fancy cottage, 45 by 22 feet, to cost $2,500; almost ready for plastering; work by the day. Dr. Geo. Halley, fancy small stable, 20 by 35 feet, to cost $2,000; excavations commenced; F. Oberdorf, contractor. For M. L. Sullivan, two-story brick residence, 50 by 30 feet, to cost $6,000; just completed; each class contracted separately.

Architect H. Probst reports prospects good. For Charles Merriam and Nath'l Thayer, general office building of the K. C. Ft. S. & G. Railroad, to consist of brick and terra-cotta, four stories and basement, 48 by 102 feet, to cost $55,000; under way; D. Pullman, builder. Synagogue for the Hebrew congregation, brick and stone, 46 by 100 feet, to cost $18,000; under way. For F. Schutte, private residence, brick and stone, two stories, 33 by 66 feet, $6,000; excavation under way; also a private two-story frame residence, 22 by 56 feet, to cost $3,100; projected; also a two-story brick residence, 23 by 60 feet, to cost $2,300; under way. For R. Gentry, private residence, 25 by 70 feet, to cost $4,300. For R. W. Ditsch, frame storehouse, 40 by 60 feet, to cost $1,680; under way.

Lincoln, Neb.—Architect Artemas Roberts: For B. Lombard, Jr., store, three stories, 25 by 100, brick, to cost $12,000; F. S. Polmin, contractor, nearly completed. For A. P. S. Stewart, store, two stories, 55 by 90, brick, to cost $5,000; W. B. Hughes, contractor; enclosed. For Mrs. W. J. Bond, store, two stories, 25 by 90, brick, to cost $5,000; L. F. Peer, contractor; enclosed. For J. W. Winger, store, two stories, 25 by 100, brick, to cost $7,000; projected. For Hass & Zep, store, two stories, 25 by 30, brick, to cost $4,000; projected. For Mr. Alexander, store, two stories, 22 by 50, brick, to cost $3,500; projected. For E. E. Brown, dwelling, two stories, 43 by 56, brick, to cost $12,000; projected.

Long Branch, N. J.—Building is very dull here on account of the weather, but promises to be good for the summer, which is usually the dull season on the coast.

Architect A. L. Hartwell has the following work in progress of construction: Hotel for Hon. David Davis, at corner Broadway and Ocean avenue, to cost about $25,000. Cottage at Monmouth Beach for Mrs. Oliver Doud Byron, to cost about $10,000. At other points, house for Geo. F. Perkins, to cost about $25,000. Residence for Charles Ridgeway, to cost about $9,000; both the above in Jersey City, N. J. Cottage for Wm. Pintard, Red Bank, N. J., to cost about $3,000. Hall for H. W. Garrison, Point Pleasant, N. J., to cost about $5,000. Residence for H. Cook, builder, at Bayhead, N. J., to cost $4,000. Also in hand the following: Cottage at Nashville, Tenn.; cottage at North Long Branch; cottage and stable at Elberon, N. J., to cost $15,000 in the aggregate; six cottages at Elberon to cost from $4,000 to $10,000 each.

Mankato, Minn.—The outlook for building here and in this vicinity is favorable, and a good deal of small building will be done during the ensuing season. Architect George Pass has his office full of work, although only a small part of it is for Mankato.

Architect George Pass: For John Vandesley, Orange City, Ia., two-story frame residence, 36 by 38 feet, to cost $2,500; plans made, also frames; contract by daywork

For John Keysser, ditto, one and a half story frame residence, 30 by 30 feet, to cost $1,800; plans under way. For A. F. Poehler, Henderson, Minn., two-story attic residence, brick, with concrete foundations and slate roof, 42 by 62 feet, to cost $6,000; plans under way. For Charles Parsons, Mankato, three-story brick residence, stone foundation, cut-stone trimmings, shingle roof, 36 by 22 feet, to cost $1,500; plans completed; contract not yet let. For First National Bank, two-story store and office building, brick and stone, tin roof, 22 by 80 feet, to cost $3,300; plans on the boards. For Wagon Bros., two-story and basement store and dwelling, brick and stone, tin roof, steam heated, 22 by 90 feet, to cost $4,000; plans ordered. For S. Lewis, two-story and basement office building, 22 by 100 feet, to cost $4,500; projected. For George Foy, one and a half story residence, frame, with stone foundations, 26 by 26 feet, to cost $1,200; Salesbury & Welch, builders. For Steven Lamb, brick residence, two stories, 40 by 60 feet, to cost $5,000.

Milwaukee, Wis.—The new addition to the Plankinton House is completed and contains 125 rooms, handsomely frescoed by Almini. The house now will accommodate about 700 guests. The board of public works have issued advertisements for proposals for building the new normal school to be erected by that city. The work is to be completed on the first of December next.

Minneapolis, Minn.—There are probably as many buildings under way in this city as during any previous year. A large number of good-sized substantial foundations were put in late in the fall, and several large cellars are now being put in.

Architect James H. Record: For D. G. Thompson, three stories, tenement house, pressed brick and Ohio sandstone, 44 by 65 feet, to cost $8,000; will commence April 1. For P. Morgan, double tenement, two stories, asbestine stone front, 37 by 52 feet, to cost $5,000; under way; Millard & Jenkins, builders. For R. S. Morgan, tenement block of five tenements, two stories, brick and asbestine stone, 42 by 95 feet, to cost $7,000; under way; Millard and Jenkins, builders. For L. W. Mowry, two-story and basement dwelling, wood construction, 22 by 25 feet, to cost $3,000; enclosed; contract by day-work. New addition for G. Reynolds, dwelling remodeled, wooden construction, 24 by 56 feet, to cost $1,000; enclosed; W. W. Obert, builder. Also for same, two-story double tenement, wooden construction, with plate and cathedral windows, 36 by 56 feet, to cost $5,800; under way; P. E. Barnes & Co., builders. Also for same, two-story frame dwelling, plate glass windows, 16 by 52 feet, to cost $1,400; enclosed; Wheelock & Taylor, builders. For L. L. Humphrey, three-story frame dwelling, about 26 by 60 feet, to cost $3,000; foundations in; contract by daywork. All the foregoing improvements, with but two exceptions, were commenced since January 1, 1884.

Omaha, Neb.—Outlook very good at present, and considerable work is spoken of. The season is too cold and work is backward; no brick to start with.

Architect Sidney Smith: For Judge Dundy, a three-story residence, stone and pressed brick, with terra-cotta ornaments; iron roof, style modern Gothic, 48 by 60 feet, to cost $25,000; building under way; enclosed; Wittinal Bros., masons. For Elmer D. Frank, same kind of a building as the above, only on a smaller scale, 34 by 53 feet, to cost $10,000; under way; enclosed. For Dr. S. D. Mercer, three-story brick, with stone basement, stone trimmings, iron roof, modern Gothic, with barn, house, 62 by 73 feet, to cost $30,000; contract let; Ittner Bros., builders. For Messrs. Gardines & Birkhouser, brick tenement, block of six houses, pressed brick, stone trimmings, tin roof, three stories, 38 by 138 feet, to cost $16,000; contract let; Henry Livesey & Co., and Griffith & Chapin, contractors. For Edwin Davis, brick tenement block, three houses, pressed brick, stone trimmings, tin roof, 38 by 66 feet, to cost $8,000; underway; builders, same as preceding. For Augustus Pratt, three-story and basement store, stone and terra-cotta, pressed brick front, 22 by 125 feet, to cost $8,000; under way; A. Rosenbury, builder. For Edwar Lamhfer, two-story and basement residence, pressed brick, with terra-cotta trimmings, 22 by 80 feet, to cost $7,000; under way.

Racine, Wis.—Prospects fair, and there will probably be considerable building during the ensuing season. Work has commenced on the excavation for the large Baker block on Market square. The trustees are now making arrangements for the erection of the building.

Toledo, O.—Many mechanics are idle, but there is a fair outlook for the ensuing season.

Architect N. B. Bacon: For D. R. Locke (Petroleum V. Nasby, editor Toledo "Blade") five stories and basement printing building, brick and stone, tin roof, 41 by 92 feet, to cost $35,000. For Hiett & Hartupee, four stories and cellar (mercantile), brick and stone, 73 by 116 feet, to cost, $280,000. For P. Poland, of Cincinnati, O., two brick tenements, two stories and cellar, 32 by 60 feet, to cost $11,000. All the above are under way. The following are projected: The Moreton Truck Co., two stories, brick and stone (storage and stables), 60 by 90 feet, to cost $6,000. For Geo. W. Thomas, three frame tenement houses, two stories and cellar, to cost $7,000. For D. R. Locke (P. V. N.), brick and stone block, five tenements, tin roof, three stories and cellar, 60 by 100 feet, to cost $16,000. For Jas. W. Myers, frame block of five tenements, two stories and cellar, 60 by 85 feet, to cost $5,000.

Topeka, Kan.—Prospects good and the season promises well.

Architects Haskell & Wood: For A. Healy, Lawrence, Kan., brick residence, to cost $10,000. At Arkansas City, Kan., stone schoolhouse, to cost $12,000. For B. Warkenlin, Halstead, Kan., frame residence, to cost $5,000. For C. W. Van DeMark, Clyde, Kan., frame dwelling, to cost $3,500. For A. Hadley, Lawrence, Kan., brick residence, to cost $5,000. For J. T. Hole, Washington, Kan., frame residence, to cost $3,000. Salina University, Salina, Kan., to cost $25,000. Schoolhouse at Burlingame, Kan., brick, to cost $10,000. Extension Co., Bellamy, Col., and Topeka, Kan., a building to cost $40,000. Emporia College, Emporia, Kan., to cost $50,000, making a total of $163,500.

St. Louis, Mo.—The cold weather which has prevailed has set things back about one month, and work on many buildings was suspended for two weeks. The outlook for the season, however, is extremely favorable.

Architect Geo. W. Pipe: For Jno. Bruno, two-story building, 25 by 52 feet, front wall sandstone, side walls brick, composition, half mansard along the front and side, to cost $7,000; contract let separately. For Edward Pipe, two-story brick front and side walls, 20 by 50 feet, to cost $4,000. For James Caroll, two-story all brick tenement, twelve rooms, arranged for four families, 30 by 46 feet, to cost $3,600; taking estimate upon same; contract not let. For R. Newbury, plans of tenement building to be rented to twelve families, two stories, 95 by 44 feet, to cost $7,000. For Dr. J. H. McLean, business block and laboratory on Broadway, to cost $50,000; frontage 120 feet, center; five stories sideways. Residence for Simeon Ray, of brick and cut stone front, to contain nine rooms, and to cost $20,000. Two houses for Mr. Van Houton, three stories each; cut stone, ten rooms each, to cost $14,000. Two residences for James Gregory, to cost $18,000. Four houses for O. H. Bottinger, to cost $24,000; plans being prepared. A grain elevator at Warrensburg, Mo., for which plans are being prepared, to cost $10,000; also, an electric light building in East St. Louis, to cost $5,000, and a good deal of other work which cannot at this time be made public.

Architect W. G. Gaines: For John Dwyer, two-story and mansard roof, stone front, 20 by 56 feet, $3,000. For Geo. Pendegast, two-story ditto, 23 by 48 feet, $3,000. For John Dwyer, private dwelling, stone front, 20 by 56 feet, $4,000. For P. W. Hassett, three-story stone front private dwelling, 22 by 60 feet, to cost $7,000. For Theo. Rick, private dwelling, two stories and mansard, 21 by 55 feet, to cost $4,000. All the above are under way. For Dr. Wilcox, three-story dwelling and office, stone and brick front, 34 by 54 feet, to cost $9,000. For Kuhn & Munges, a three-story building and store, 30 by 68 feet, to cost $7,500. For P. Mulcahy, row of stone fronts, 75 by 50 feet, to cost $12,000. For Ed. Brown, two-story tenement house, to contain twelve rooms, 30 by 50 feet, to cost $4,000; the above four buildings ready to start. For Al. Brankman, two-story tenement, 50 by 50 feet, to contain eighteen rooms, to cost $7,000; plans under way; also two other sets of plans under way.

Architects P. F. Meagher & Son: For Col. R. D. Hunter, dwelling, with seventeen rooms, two stories and attic, 63 by 89 feet, to cost $65,000; nearly finished; sublet. For Thos. McCormack, store building with dwellings above, three stories, 26 by 75 feet, to cost $15,000; nearly finished. For Mrs. Pabts, three-story dwelling, to contain ten rooms, 22 by 73 feet, to cost $6,000; nearly finished. The following buildings are under way: For Daniel Daly, three-story dwelling to contain ten rooms, 22 by 60 feet, to cost $5,200. For John Klay, three-story carriage factory, 27 by 115 feet, to cost $12,000. For Louis Bader, a three-story store, 28 by 60 feet, to cost $10,000; also three dwellings, three stores to contain ten rooms each, 20 by 52 feet, to cost $13,400; projected. For W. R. Rayner, three-story dwelling of ten rooms, 23 by 72 feet, to cost $6,500. For Henry Good, a six-room dwelling, two stories, 20 by 50 feet, to cost $3,000; under way.

Architect A. E. Cook: For Jacob Meyer, two stories, twelve rooms, stone front with brick backing, on Lindell avenue, west of Grand, 45 by 73 feet, to cost $20,000; ready for plaster. The First Congregational Church, broken ashlar stone with Bedford, Ind., cut stone trimmings; excavations down; to be erected on Delaware avenue, west of Grand; plans made by Hurd & Rice, of Boston, Mass., 104 by 118 feet, to cost $70,000; under way. The above are being built by Mr. A. E. Cook.

Architect Chas. K. Ramsey: For Thomas D. Miller, two-story dwelling-house, brick walls and slate roof, 28 by 45 feet, to cost about $5,000; projected and plans now in the hands of contractor. For Wm. O. Gibson & Son, a three-story brick store with flats above; cut stone trimmings; plate-glass in store front; flat roof 25 by 87 feet; to cost about $10,000; projected; plans not yet complete. This architect reports prospects good, and a large number of plans are under way.

Architect F. Wm. Raeder: For Rich Hill Water Works Co., just finished, direct pressure pumping station, which includes a dwelling on second story for pumping engineer; plant with nine miles of piping and cost $100,000. A similar work is just commenced for the Paola Water Works Co., plant to have six and a half miles of piping, and to cost $75,000. The Rich Hill Gas Light & Fuel Co. are also projecting works to cost $30,000.

Architects A. Grable & Co.: For Mrs. Kingsland, a two-story building, basement, mansard slate roof, hardwood finish, 22 by 63 feet, to cost $9,000. For Mrs. Kingsland and Dr. Moore, a three-story store and office-building, brick and galvanized iron, hardwood and plate-glass finish, in *Renaissance*, 43 by 90 feet, to cost $14,000; projected. For Maguire & Hartnett, three-story store and office-building, pressed brick front, galvanized trimmings, modern Colonial style, 23 by 63 feet, to cost $7,000; projected. For D. G. Futt, alterations of dwelling, two stories, brick, 22 by 36 feet, to cost $2,600; projected. Also for same, three-story brick and terra cotta, slate roof, basement, hardwood finish and ceilings *Renaissance*, 25 by 75 feet, to cost $13,000; projected. The present outlook is very encouraging for all classes of buildings, and we expect to be very busy this season.

St. Paul, Minn.—Season not fairly begun, but the outlook more than promising. Architect A. M. Radcliff: For A. H. Wilde, block of five stories, stone front, 83 by 160 feet, to cost $100,000. For Jas. S. Burris, block of three stories, brick front, 141 by 60 feet, to cost $25,000. Syndicate block, three and four stories, brick and stone, 125 by 90 feet, to cost $90,000. For A. M. Reeves, block of four stories, brick and stone, 67 by 140 feet, to cost $60,000. For L. Eismenger, block of four stories, brick and stone, 24 by 80 feet, to cost $20,000. For J. A. Strehlein, block of three stories, brick and stone, 24 by 81 feet, to cost $8,000. All the above are under way. Rebuilding state prison at Stillwater, Minn., to cost $110,000. For A. Oppenheimer, a dwelling of brick and stone, to cost $22,000.

Washington, D. C.—A bill has been introduced in the house by Mr. Glascock, for the erection of a public building at Oakland, Cal., to cost $100,000; also, a bill has been introduced by Mr. Morrill for the erection of a public building at Atchison, Kan., to cost $90,000; also, a bill by Mr. Farley to provide for the erection of a public building at Sacramento, Cal.

The United States senate has passed a bill authorizing the construction of a fire-proof building for records, to cost $250,000.

Illinois Corporations.—MARCH 11.—The Chicago & New England Granite Company; capital stock, $10,000; incorporators, John Lemon, Fred P. White and Geo. A. Haley.

MARCH 10.—The Chicago Real-Estate Board; capital, $250,000; incorporators, Edwin Stewart, Samuel Chandler and J. H. Krebs.

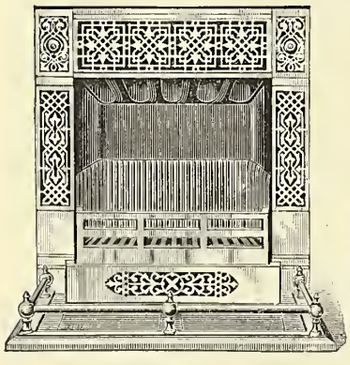
Miscellaneous Synopsis.—A contract has been closed for the erection of a hotel, to cost $20,000, at Minnewaukon, on Devil's Lake. Parties from Buffalo, N. Y., are to build it.

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GRATE.



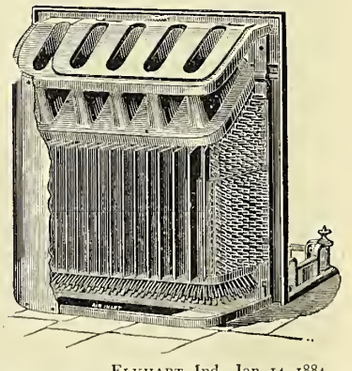
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, MINN., NOV. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, IND., JAN. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

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THE INLAND ARCHITECT AND BUILDER.

Vol. III. No. 3

APRIL, 1884.

THE

INLAND ARCHITECT AND BUILDER

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L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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"AN architect," says a morning print, who builds a "fire-proof" apartment which burns with loss of life should be made criminally responsible. But suppose the architect builds such a building as the projector and owner of the premises desires to have built at a certain cost, and puts into it such materials as the owner directs, so that it is ostensibly but not practically fire-proof, and the building burns with loss of life, who really is the party who should be made criminally responsible? We take it that the man who causes the erection of such a building, and is the owner, is the proper person to be held accountable, and not the architect, who, neglecting to adhere as closely as possible to his plans and estimates of cost, would soon find himself involved in trouble. No; place the responsibility where it properly belongs — upon the parsimonious owner of such premises — and make him bear the odium to its full extent.

IN answer to the question, "What is a fire-proof building?" the New York *Tribune* points to its own structure, which, it says, has been acknowledged by competent judges to be a building of this kind, and has been imitated more or less successfully in most of the towering masses of masonry recently built in lower New York. It claims that the following six conditions are requisite in order that indestructibility may be secured, viz:

1. The outer walls should be of absolutely incombustible material. The experience of the ages has shown that thoroughly burned brick is the best material for resisting fire, and also the most durable. 2. The inner or partition walls from cellar to roof should be either of brick or concrete. 3. The floor beams should be of iron and should rest on brick walls. They should never be supported by iron columns. Such columns yield readily to heat, are warped and twisted, and let down the floors supported by them (unless protected by fire-proof material). 4. The iron beams should be surrounded by concrete or other fire-proof material. There should be concrete above and below and on either side of every beam. There should be a solid layer of non-combustible material separating the ceiling below from the floor above. 5. The halls should be tiled. The stairs should be either of the best slate, stone or iron, and should be supported by brick walls. The elevator shaft should be of iron or brick, and should be properly closed at top and bottom. 6. The roof should be made of uninflammable material, preferably of concrete, slate or gravel, supported on iron rafters.

The above is certainly a lucid explanation of what a thoroughly constructed fire-proof building is. The St. George flats, which recently burned in New York, was supposed to be a thoroughly fire-proof structure. It was seven stories and basement in height. The front was of stone ornamented with terra cotta; at the spacious entrance hall were polished marble columns; the stairways in front were of stone and the halls were tiled, and the elevator shaft was incased in iron. Everything in front looked solid and safe. But when this "magnificent fire-proof structure" was subjected to the practical rests pointed out by the *Tribune*, it proved not to have been in the most remote sense a fire-proof building. The few precautions that were taken for the sake of appearances were confined to the front section. There the elevator and air shafts were lined with iron, and the stairs were of stone, but in the rear the dumb-waiter and air shafts were of wood, and the stairs were of the same material, and of the most flimsy construction. The wooden shafts acted like big flues open at bottom and top, and the inflammable material with which they were surrounded made an unmanageable bonfire. In the distribution of the steam-pipes the commonest precautions were neglected. The pipes seem to have been in direct contact with lath, plaster and frame partitions. The floor beams were of wood; there was no lining of brick or concrete between the floors, and the partitions were of lath and plaster. All the essential conditions which we have mentioned were either lacking or inadequately supplied.

THE destruction of the "St. George flats," and the fortunate rescue of nearly all its inmates from what seemed at first the precursor of another great holocaust, should not fail to keep alive in the board of health department of this city a deep interest in the welfare of the many hundreds of people in this city who are crowded together in tenement houses of a similar kind. And yet, from what personal observation has taught us, and from the practical experience of those who have, perhaps through the sheer force of circumstances, been compelled to pass many nights in a crowded lodging-house (ycleped, in the common parlance of the day, the "St. Bernard Hotel," or some other equally euphonious name),—we say from what such parties have told us of their

experience, that in half a score of such houses in Chicago there are nightly gathered together from one, two, three hundred of lodgers in three, four and five story lodging-houses, not one of which, in case of a fire in the premises, has provided for the helpless inmates a single avenue of escape, except the narrow and winding stairways by which the upper stories are reached. Let the health department, if it can give so much of its time to this matter, examine personally some of the half-dozen so-called hotels which are situated on State street between Van Buren and Harrison, on the west side of the street, and it will find in the Marvin house, and houses of a similar kind adjoining, a condition of things on the upper floors of these houses or "hotels," which the board of health may declare they had no knowledge of whatever. Every night scores of men are crowded in these places, in small narrow rooms, from which a speedy exit would be utterly impossible in case of an outbreak of fire. There could be no possible chance for many of them to escape a most horrible and certain death. There is not a single fire-escape of any kind provided in any of these buildings. The landlords, if they have ever been notified to provide such means of escape, have utterly ignored the command. It is said that the walls of these buildings are not strong enough to support any apparatus for escaping in case of any dire emergency. Then, let us ask, why are they permitted to be used for "hotels" or lodging purposes? In case of fire the walls would prove doubly dangerous, and would even involve the peril of a still greater loss of life. The buildings we have cited are not all there is of the kind. Similar structures exist in other places on the South and West sides; and these demand, before it may be too late, the immediate attention of the authorities whose bounden duty it is to look after just such alarmingly dangerous fire-traps as all these structures are. It is terrible even to think of what might happen in any one of them during almost any night; how much more would be the reality! Since the daily press has said nothing about these dangerous fire-traps, we take it upon ourselves to send out this note of timely warning to the authorities, and ask them to examine the localities for themselves, and to act promptly in the matter of securing to the inmates of these concerns some reasonable hope of safety by flight in case of the terrible emergency by fire. The political conventions that are to meet in this city during the ensuing summer will draw hither thousands of people, and there is a prospect that almost every public house will be more than usually crowded. Surely considerations of such vast importance to human life ought not to pass, for a single day, the exacting observation of the powers that be, and the prompt application of providing means of speedy egress from all such dangerous places.

IN all, no less than twenty bills have recently been introduced in congress, each of which propose the virtual abrogation of our patent laws. Instead of allowing seventeen years for a patent to expire, one of the bills proposes to reduce the limit to five years. The proper title for such a bill ought to read: "A bill to crush out inventive genius, and put a stop to any further new inventions of any kind whatever." The introduction of bills of the nature stated has thoroughly aroused the inventors of the Northwest, and in Chicago and other cities meetings have been held, and largely attended, to take steps to counteract legislation so pernicious in its character. Already protests against the passage of such bills have been signed by several hundred well known inventors, and the list will swell to thousands of names by the time the committee having the matter in charge are ready for a visit in person to Washington. The *Scientific American* has been especially vigorous in its defense of inventors, and has opposed legislation of the character proposed. It says, in speaking of the value of property in patentrights, that

> "The courts have held the propertyrights of patentees to be as sacred and inviolable as any other species of propertyrights; and public interest demands that they shall be as scrupuously respected and quite as carefully guarded, for they contribute their full share to the public well-being. Exact figures cannot be given; but anyone who will inquire into the value of property vested in, or contingent upon, patentrights on New York island alone — property whose value would be unsettled or destroyed outright by the proposed legislation — will soon arrive at a sum that would go far to purchase the entire farm property of whole states."

If any change be made in the government supervision of patents, let it be in the direction of encouraging inventors, and giving necessary aid to those worthy of development, so that the poor inventor may reap a benefit from his creation, and not the moneyed speculator, to whom in the past too often has fallen the lion's share.

UNDER the title, "A plea for a more modern and original style of architecture," a writer of some vigor complains, through a fairly circulated medium, that architects in this country have made very little progress during the past twenty-five or thirty years. "The great bane of modern architecture," he contends, "is the tendency of a good many architects to be ruled by precedent." Without affirming or denying the truth of this statement, which has been prolific of so much controversy in the past, and with no desire to have it renewed, we will say that the evil is, perhaps, equally great in all the arts of long standing, and it will be proportionately difficult to change. It is well known that long usage makes custom. As bearing somewhat upon this point, one of our best architects, in speaking of this subject, made the remark, a day or two since, that "if the celebrated treatise of Vitruvius had been destroyed before its discovery, it is barely possible that the world would have been no wiser; and also that modern architecture would have been a gainer." He further went on to state, in substance, that he believed that one requisite of a great architect was to be gifted by God with the eye and feeling of an artist. Such men as Raphael, Leonardo de Vinci, and many others whose names and works have been handed down to us, were unquestionably men of that stamp; but where can we point to their equals today? Such men, it would seem, are the products of centuries only. There is one thing, however, which cannot be too frequently or too strongly urged, and that is, a better general education for all young men who think of becoming architects, and to avoid inducing young men to follow any branch of the fine arts which they do not evince a decided taste for before they leave school.

IN this direction our training schools are likely to be highly beneficial, as they will unquestionably direct talent and develop genius in the channels of occupation to which they can best adapt themselves. The day when young men were apprenticed to an architect much in the same manner as they are now apprenticed to a mechanical trade has gone by; or, if there be any such system anywhere still followed, the young man soon acquires such a spirit of independence, and deceiving himself by the hypothesis that his superficial knowledge is sufficiently advanced to enable him to perform the work and assume the responsibilities of an architect, he takes a step to fulfill a position for which he is almost totally unqualified. Is it to be wondered at, therefore, that we have so many men in this profession who are in fact only so-called architects; whose practical knowledge of architecture in its broadest sense amounts to so little; who possess no originality either of conception or design; who have so few natural gifts for their calling, neither possessing the eye nor the feeling of an artist, and who have nothing to fall back upon but prece-

dent? The question now-a-days is, in many instances, not whether they are suited for that profession, but it is more whether the profession and the income it will bring is suited for them. The reform that must eventually follow, and change somewhat the present order of things, is to be looked to in the American Institute of Architects, which has for its one primary object the defining and encouraging of upright and efficient professional practice; and this association, which is a sort of federal union, having divisions or "chapters" in Baltimore, Washington, Chicago, Cleveland, New York, Philadelphia, etc., is, we are glad to say, exercising considerable influence in the right direction. Whether the prejudices in favor of ancient architecture, either classical or Gothic, must be given up or diminished, as the writer to whom reference is made would have us believe, it is not our province to say. Time and the best possible education that our rising architects can receive will determine that question. This much, however, may be said, that while all forms and details left us by those who have gone before are free to be used, the combinations in which they are employed must depend, for their beauty and effect, on intrinsic properties, and not on their having been used in the same combination before, or an association connected with them, whether classical or otherwise which have no connection with their present use.

THE ordinance requiring all buildings in Chicago over ninety feet in height to be absolutely fire-proof is a timely and proper measure. It has been suggested that the limit of height should have been made at a diminished figure, and recommendations have been made to the council to restrict the height to eighty feet, at which altitude and all beyond that every building shall be proof against flames. It is urged that the fire department cannot do any effective work with a fire in the upper story of a building over seventy-five feet high, and for this reason every building which ascends to the height of eighty feet should be constructed of incombustible material. The public are undoubtedly thankful for the ordinance as it stands, but it certainly would entail no peculiar hardship upon the projectors of buildings to compel them to observe in the future still greater regard for the public welfare and safety by putting up substantial buildings. So far as all buildings which may be erected for tenement purposes are concerned, the law should restrict their height to four or five stories; each story to have a high ceiling, and every such structure to be built in a manner which would make combustion especially slow in case of fire. All such buildings ought to be absolutely fire-proof; but since this condition cannot be always attained, the next best thing to do is to have them built as nearly fire-proof as the means at command will supply.

A PRIVATE meeting, at which there were present a fair representation of the professional architects of Detroit, was held in that city a few days ago, at which, it is reported, the matter of rates and discrimination were thoroughly taken under consideration. There has in the past, as is well known, been a good deal of competition, and the result has been that no uniform scale of prices for professional work has been adhered to. The object, therefore, of the meeting was to form a union of sentiment and feeling among the brotherhood and to establish an association which will put a stop to underbidding, rate cutting and architectural "scalping," so to speak, which has, to a certain extent, injured the business of first-class architects. A schedule of rates will probably be adopted for the government of the members, and its violation will result in some form of discomfiture to those who violate it, if they become members of the union. "It can readily be seen," said one of the architects who had attended the meeting, "the proposed union will be a good thing for the established members of the profession, who will get new business on their reputation and keep what they now have, but I do not believe it is going to be a good thing for those architects not so well established. They will virtually be barred from competing with the class referred to, people naturally preferring the work of the established architect to that of the younger members when their prices are the same. Many people are induced to try a new architect when his rates are lower than his brothers', and if he does good work and gives satisfaction he will retain the custom thus acquired. I shall go into the association. If I don't like it, I shall leave it."

THE journeymen plumbers of Chicago have very wisely concluded that the proper and the best way to settle all disputes which may arise between their employers and themselves is by referring all such matters to a committee of arbitration. Accordingly they made this proposition to the Association of Master Plumbers at their last monthly meeting, and it was accepted and such committee appointed. This action, so eminently wise and proper, will, in all probability, obviate the necessity of any strike or lockout on the part of the employés, as all awards of a committee of arbitration are considered binding on both sides. The collision between one man's liberty of action and another's has given rise to many questions of great nicety; but so long as there are trades unions these are likely to occur; but no one whose judgment is not blinded by selfishness and passion will deny that if there is any difference between a free man and a slave, it is that one may labor or not, as he pleases, provided he does not burden society with his support, while the other has no such choice. The dictation of trades unions as to what disposition men must make of their own labor, sometimes, indeed often, brings men into slavish subjection, and when any body of men are wise enough to leave their disputes or disagreements to a board of arbitration for settlement, it shows a disposition among employés that will result largely to their own advantage. The true purpose of a trades union should be the elevation of the trade and the education of its members.

IT is gratifying to those whose mission it is to design and build, to find the projected permanent exhibit of building materials is slowly but surely becoming a fact, and that the names of some of the best-known firms in their several lines are now connected with its progress in the way of exhibitors. The extremely busy season we are happily experiencing has prevented many firms who long ago selected and leased their space on the floor of the exhibition hall from erecting such displays as they wish, and it has necessitated extra work upon the part of architect Gay and his corps of assistants; but before the season closes it is hoped that so perfect will be the building-material representation, that those looking for these things will no longer be obliged to ride from one end of the city to the other to see the different manufactures. Eastern firms are seeking this valuable method, as well as others, to come into legitimate competition with the West; and while to all these the exhibit is of the greatest importance, the public are the greater gainers, for by seeing the different materials side by side, the merits of each can be faithfully compared. As this exhibit is open free to the public, it is destined to become an educator also, and will give to architect and client alike many new ideas in the construction and arranging of our buildings. As Chicago is the center of Western enterprise, the West looks to her for the best, and knowing this, the material manufacturers are bound to make the permanent exhibit a permanent success.

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO

BY W. L. B. JENNEY, ARCHITECT.

PART X.—THE CLASSIC PERIOD—Concluded.

A SINGLE lecture is scarcely sufficient to illustrate and explain the most glorious period of architecture that has ever existed, and from which we can learn many a valuable lesson.

Not only did the Greeks treat with consummate art everything they undertook, but we also find that every feature and every detail of their architecture, from the plan of their temple to the most minute detail of its ornamentation, was admirably suited to the purpose intended, indicating not only great thought and study on the part of their architects and builders, but also, as we know to have been the case, a correct appreciation of art on the part of the people. The Greeks were a nation of artists. Fitness of things was their first principle.

We do not find one architect copying an Egyptian temple for a tomb, nor another copying the front of an Assyrian palace for a private dwelling, or a piece of furniture, as is too often done today. For had he been so disposed he would not have found a client willing to pay for such folly. But each was intent upon improving the style that the requirements, and the building material, under the influence of the Greek genius, was creating. There was no foolish searching after novelty without regard to fitness, nor passing fashions lasting but two or three years, as at present.

What will the archæologist a thousand years hence have to say of our epoch, should anything we build last so long? He must conclude that we had no art of our own, and therefore copied, without thought or study, the first thing that struck our fancy. Ten years ago it was Mediæval, then Queen Anne, now Colonial, and what next, who knows? And with these fashions we find a sprinkling of every style under the sun, since civilization began.

It may be asked, since the most glorious period of Grecian architecture was the finest ever known, what have we to do but to copy the Grecian work? The answer is easy. There was nothing in Greece twenty-two or twenty-three centuries ago that accords with the requirements in America in the nineteenth century, except those great general principles that are independent of time, country or people. These truths are now, as they were then, the foundation of all true styles. The requirements must be met in the most direct manner.

The construction must be substantial, enduring, and well adapted to the material at hand, and at the same time be elegant and refined in its proportions, and that its ornamentation shall grow naturally out of the construction.

We want a style for America suited to American wants, and we can have it only by working as the Greeks did. Not by copying first this and then that, but by studying each feature and each detail, accepting what best suits our purpose and arranging all with fitness and good taste.

Rome, as she rose to power, absorbed Greece, and endeavored to apply her arts to Roman use.

In Greece, architecture had been used, as far as our knowledge extends, only for temples and monuments; in Rome it was required for every variety of purpose,—baths, amphitheatres, triumphal arches, theatres, bridges, aqueducts, tombs, basilicas, villas, etc.

In Roman work the plan is essentially their own. For the exterior, as several stories of openings were often required, they made use of the arch springing from piers, and this construction the Greek workmen were called upon to decorate, and as the Greeks knew of but one style, the orders, these they plastered onto the Roman construction and produced what is so often seen, stories of arches, with entablatures between, supported by columns mounted on pedestals, in front of the piers. This composite arcade, as it is called, is a Grecian screen in front of a construction of Etruscan design, and is the true Roman order. Although not without considerable richness, the two constructions are too distinct to be good architecture. The Grecian work evidently serves no other purpose than a constructed ornament, unless it may be buttresses for the wall, which could easily be accomplished in a more direct and economical manner.

After the Roman empire moved the capital to Constantinople, the Greek architects and artisans worked under Asiatic influences, and a new style, the Byzantine, was produced, which, later, on the banks of the Nile, the Nestorian Greeks, in the employ of the Saracens, modified and developed into the style that, during the dark ages, moved along the northern shore of Africa into Spain, where we find it in its perfection in the Alhambra.

It is from this style on the one hand and the Romanesque on the other that the French genius extracted the germs for their Gothic which in the Mediæval period, spread over western Europe in the great cathedrals that are today the wonder and admiration of every architect and of every intellectual traveler.

Saunterings in Spain.

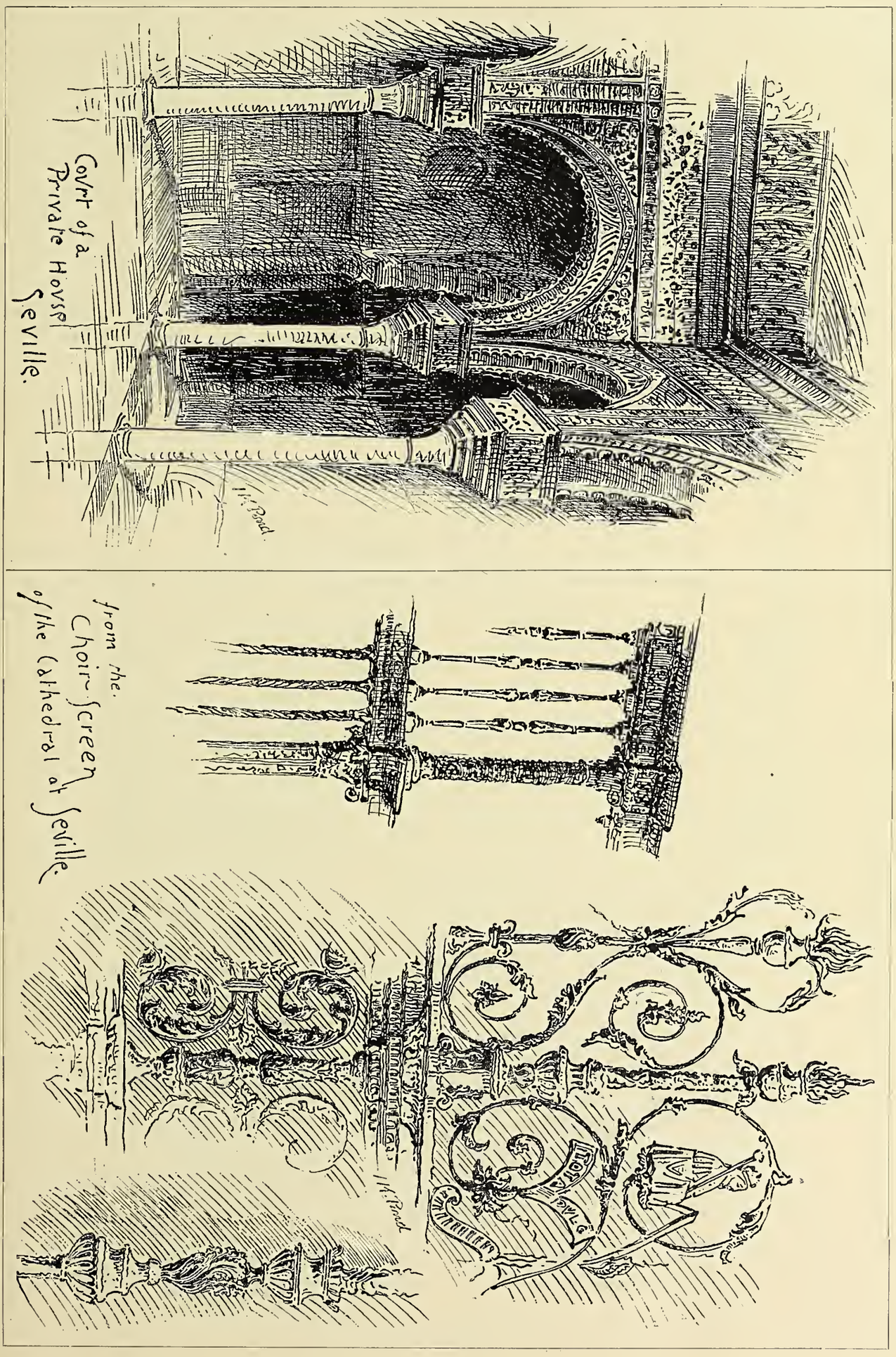
BY I. K. POND.

THE art shrines of Spain do not attract in great numbers the devotees of our country. The reason is obvious. Railroad and hotel advantages are not just what the American has been used to, but the marvelous richness of art and architecture furnishes a treat for the student which more than compensates for the inconveniences of travel. An atmosphere of the Orient pervades the architecture, of the present as of the past, from the southern shores to the peaks of the Pyrenees. The Gothic buildings, if they do not gain in purity of style, lose nothing in richness and in beauty of detail through the influence exerted by their Arabian neighbors on the tastes of their designers. But when the fanciful imagination of the Moor swayed the mind of the designer in the style of the Renaissance, the results were wonderful to behold, and that principle of decoration which is the charm of the Arabian style was so corrupted that the structure is a mass of irrational detail which wearies the beholder and turns the rococo sisters of other countries pale with envy. Not that there are no fine examples of Renaissance in Spain, but that where these examples occur they exhibit a Northern rather than a Southern feeling. In many instances, and notably in the cathedral at Seville, is there a blending of the Renaissance and pointed styles which is superb. The church in question, which covers nearly, if not quite, as much ground as does St. Peter's at Rome, was built on the site of one of the grandest Moorish mosques of Spain, the minaret of which still stands capped by a belfry in the Spanish style, and as fragments of the mosque were used in the construction, here and there about the church crop out beautiful hints of old Moorish times which lend an inexpressible enchantment to the spot.

In the Spanish towns in general, comparatively little taste is displayed in the designs of street fronts of private buildings, though in the newer portions of principal towns this phase of the work is receiving attention; but throughout the country the façades on the courts, which are entered through spacious vestibules from the streets, are exquisite in design, always Moorish in feeling, and often carried out in a perfection of detail equal to that of the Alhambra itself. The vestibule is guarded by beautifully-wrought iron gates, which arrest the eye as well as the entrance of the visitor, and, if he be an architect, lead him to wonder if Spanish artisans might not be transported and made to flourish on American soil; for in no other country does one see such examples of the ironworkers' art. The choir and chapel screens are generally of iron and the space filled is often thirty or forty feet in height by rods in length. In this day, when the architecture of our country is calling loudly for artistic designers and workers in iron, studies from the "old Spanish masters" might not be made in vain. The amount and beauty of the wood carving is another continued source of surprise. The barrenness of the Spanish hillsides may be in a measure accounted for by the quantity of superbly worked wood in all classes of buildings, from churches to stables. The intricately lined ceilings of some of the private houses, which date from Moorish times, as well as the massive altars, choir stalls and organ frames of the churches, are marvels of cleanly cut and beautifully designed wood carving.

One would think, too, that we advanced Americans might take a lesson in construction from our Spanish brothers, who are in many respects where Christopher Columbus left them when he came over to us.

A houseowner who, in spite of fairly high rents, cannot clear 2% on his investment points with pride to his building and says: "There is my money in that house, and it will stand an earthquake or an insurrection," and it is not impossible that it may be tried by both. If a Spanish house were as satisfactory in its arrangements as it is in the stability of its construction, it might serve as a model; but as it is, there is little about it which an American architect would not study to avoid.


Court of a
Private House
Seville.
From the
Choir-Screen
of the Cathedral at Seville.

The Stained-Glass Competition.

BY FRANCIS LE BARON.

THE competition for the stained glass in the Chicago Board of Trade building is closed, the designs are all handed in, and the contract for the twenty-nine window-transoms, in which there are twenty-four hundred square feet of glass, has been given to John La Farge, of New York, at a uniform price of five dollars per square foot, which was the limit of price fixed by the board of management. Of these twenty-nine transoms, thirteen are in the main hall, four are in the pavilion, or corner tower, and twelve are in the smaller hall of the call board. The skylight, which is sixty-one feet square, and consequently contains three thousand seven hundred and twenty-one square feet, the price of which was fixed at one dollar and seventy-five cents per square foot, has not as yet been given out. There are several fine designs for it, and we cannot but hope that the work will be given to some Chicago firm, and executed at home. There were twenty competitors, five from Chicago, G. A. Misch, Healey & Millet, McCully & Miles, Kinsella & Haywood, and W. H. Wells & Bro. Co.; from Boston, one, Kelley & Co.; from Philadelphia, one, "The Key-Stone Stained-Glass Works; from Orange county, New Jersey, one, Payne and Peine; from Newark, New Jersey, one, Charles N. Schmitt; from Brooklyn, New York, one, Max Mittermaier. From the city of New York, ten, Tilden & Arnold, Edward A. Boyd & Sons, P. F. McMahon, Belcher & Co., The John La Farge Co., Thomas Jones, H. Edgar Hartwell & Co., T. & John Morgan, F. A. Kirtland, and The Decorative Glass Mfg. Co.

McCully & Miles furnished some very beautiful designs. Their designs for the window-transoms were circular medallions treated pictorially, with figures, etc., set in very rich mosaic work, with strong, well-designed borders. Their drawings did not do justice to their designs unless one were accustomed to translate water-colors into the brilliancy of glass; to an uneducated eye, the colored design, with its geometrical pattern, gave the impression of monotony and sameness, but to an accustomed eye they offered very brilliant effects in the use of Venetian glass, and most delicate and artistic combinations of color. One medallion showed a sheaf of wheat, a wheat-field, and distant hills against the sky: this was set in a ground of delicate purples, greens and gold, most harmoniously mingled and shaded; a rich border surrounded the whole in olives and reds with brilliant jewels to light it up. The next design was a locomotive, with background of regular pattern in varied tones of color, with a border of jewels.

Next came a medallion called "Mowing." No laboriously swung scythe was here; it was nineteenth century mowing, the improved article of the present day, with the mower riding at ease on his machine, the background being a combination of rich tints with very brilliant jewels. One panel showed growing maize, in its green and golden splendor, against a deep blue sky, the setting being executed in honeycomb pattern with rich border. Another panel showed reaping after the old style:

> "The reaper with sickle keen
> Who reaps the bearded grain at a breath,
> And the flowers that grow between."

The other medallions were "Ploughing," "A ship under full sail," "Hop-picking," and "Commerce,"—all these were set in backgrounds showing fine mosaic effects, very gorgeous and splendid, and yet refined. The smaller panels were "Astronomy," "Weaving," and "Iron-working," the student observing the stars through his telescope, the workman at his loom, and the boilermakers hard at work on their rivets. Their design for the skylight was a magnificent piece of color, foliage, fruit and flower work, in mosaic of Venetian glass; it needed to be translated into the living splendor of the glass to be appreciated.

Kinsella & Haywood showed some good designs executed in glass, not having reference to the building, but merely a specimen of their work, and with these they sent in three small sketches,— one of flowers and fruit, good in color, one a pictorial medallion of shipping, railroad, etc., with frame of fruit and flowers, the design somewhat crowded, but showing a masterly appreciation of the use of glass. Their skylight design was very pleasing, wheat-ears gracefully arranged in a very rich border. And here I wish to say one thing. Stained-glass has its uses and its abuses. Its use is plainly seen in these great halls of the Board of Trade. It has also its limitations, which those who work in it sometimes forget, greatly to the injury of their designs. To do good and artistic work in glass one must be so thoroughly imbued with its limitations that he will feel and obey them without *remembering* them. The designs submitted by W. H. Wells & Bro. Co. were a set of really beautiful water-color drawings,—"Ploughing," "Sowing," "Reaping," "Threshing," "Husking," "Harvest-Home" (transporting the grain from the field with oxen), a wheat field in the afterglow of sunset, with a new moon shining in the sky, and two youthful figures for the romance of the picture, "The Old, Old Story," "A Hay-making Scene," "A Herd of Cattle" and "A Herd of Swine."

Healey & Millet send a fine set of designs to represent their work — "Stone"— sculptor in blouse and cap hewing from the marble a bust of heroic size; "Textile," a pretty young girl spinning on a small spinning-wheel; "Iron," a blacksmith in leather apron, red shirt and cap, resting from his labors at the forge; "Wood," a workman in blue blouse and cap, in his workshop surrounded by his tools, and holding in his hands a piece of work, which he appears to be examining; "Commerce," a goddess in red, with caduceus supported by two eagles, shipping on one side of her, railroad with locomotive ("that resonant steam-eagle") and train on the other; "The Harvest," a woman carrying a sheaf of wheat in a wheat-field,—Ruth, perhaps, in the field of Boaz; "The Sower," a man scattering seed, reminding one of Millet's great picture of "The Sower." The other panels are dashes of brilliant color.

G. A. Misch has taken things out of the antique and brought them into the present century; no scythes, or sickles, or flails for him; he gives us modern farming machines—reapers, mowers, binders, corn-shellers, fanning-mills and plows, on a background of wheat-fields. One design, which evidently carries allegory with it, shows a bull and a bear in a wheat-field; the bear is making off with a sheaf of wheat, and evidently holds the market, while the bull is pawing the ground and roaring in despair and wrath. All the agricultural machines are newly-painted in colors of the brightest.

So much for our home work. In comparing it with the foreign work we feel great pride and pleasure in the success of our home artists.

Kelley & Co., of Boston, show groups of strongly drawn figures, male and female, gathering the fruits of the earth; the practical implements of husbandry — the shovel, the sythe, the hoe, etc.— surround them. These groups are set in very rich borders of fruit and flowers. There are also magnificent figures in very graceful arabesques of foliage. These designs are especially soft in color and tone. From the Philadelphia firm we have a design in glass of a man sowing in Mediæval dress,— yellow hood, green cape, red robe, blue nether-garments and brown shoes; on either side of him ripening maize; the whole in a border of fruit. P. F. McMahon's designs are remarkable for their vivid action; agriculture is shown by plowing and sowing; the Marchiest of March winds seems to be blowing and the poor men are evidently having a hard time. It is New England farming, where nature does little and man has to do more than his share. "The metal-workers" seem by their action to be forging a thunderbolt for Jupiter. There is immense action in all these designs. Edward A. Boyd & Sons, New York, furnish all the plate glass for the building, and their designs for the stained glass show masterly drawing. The figures remind one of church work. These are "Science," a graceful female figure advancing with dividers and book, "Music," "Painting," "Agriculture," "Commerce," Engineering,"— these female figures are superbly drawn in a grand, broad style. The "Engineering" reminds one of Ary Sheffer's "Christus Remunerator."

Belcher & Co.: "Flora, Ceres, Pomona," in one cartoon, and other well drawn figures of "Justice," "Prosperity," "Liberty," "Agriculture," and "Commerce,"— all well adapted for glass-work.

Thomas Jones sends a very excellent skylight design,—flowers and foliage in soft, light, brilliant colors.

Kirtland's designs are as full of rest as McMahon's are of action. "Agriculture" is represented by a woman reposing under a tree with a flock of sheep around her. It is Little Bo Peep to the life, and one can't help thinking, as he looks at the reposing woman,

> "She's left them alone and they'll come home,
> Bringing their tails behind them."

"Engineering" is a tired woman with measuring-tape dropping from her fingers,—a train rushing by in the distance. "Mechanics," a blacksmith kneeling at his forge, heating his iron held in a pair of pincers; his time for action has not come. T. & John Morgan show a most excellent skylight design. Hartwell's designs were "Electricity," "Commerce," and "Agriculture." Payne & Peine send a number of designs in color on black cardboard, "Ploughing," "Reaping," etc.,—the plow, the oxen, the scythe and the wheat-field, interspersed with a little music,—David playing on his harp to a large bouquet of art-flowers in a pot. "Commerce" has the usual water and ship, with men running about with bales of goods that they have evidently never picked up and never intend to put down.

Charles A. Schmitt sends five designs; one of them is a train of cars, with the sign "Look out for the engine" turned toward a pile of rocks, while the locomotive evidently intends to run down an emigrant wagon on the other side.

Max Mittermaier sends arabesques of foliage with farming tools.

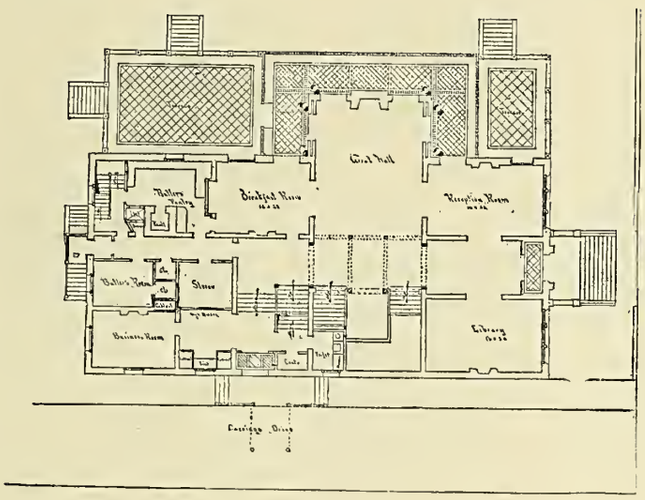
Tilden & Arnold show a very beautiful skylight, delicate foliage in exquisite colors; the whole design graceful, light and elegant. Their window transoms are treated allegorically.

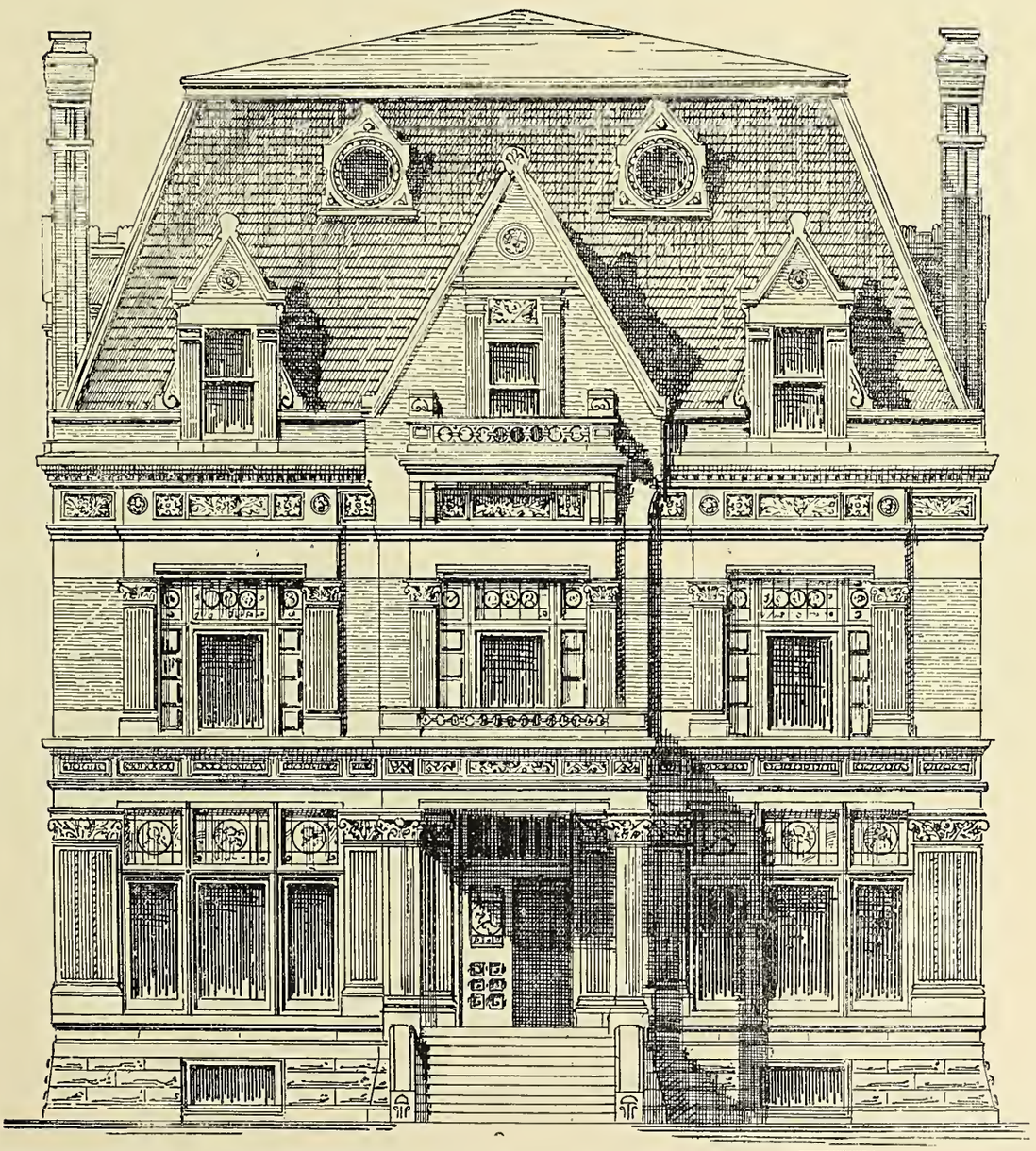
The La Farge designs, which have been accepted, are as follows: "The Genius of the City,"— a magnificent female figure, with the civic castellated crown. "Fortune,"—this is executed in glass, and is magnificent. Fortune sits upon her wheel, and one seems to hear Tennyson's Enid singing:

> Turn, Fortune, turn thy wheel and lower the proud;
> Turn thy wild wheel thro' sunshine, storm and cloud;
> Thy wheel and thee we neither love nor hate.
>
> Turn, Fortune, turn thy wheel with smile or frown;
> With that wild wheel we go not up or down;
> Our hoard is little, but our hearts are great.
>
> Smile and we smile the lords of many lands;
> Frown and we smile the lords of our own hands;
> For man is man, and master of his fate.
>
> Turn, turn thy wheel above the staring crowd;
> Thy wheel and thou are shadows in the cloud;
> Thy wheel and thee we neither love nor hate.

"Commerce." "Farming and Agriculture,"— figure of a man in dress of a husbandman; at his feet a lamb, in his hands ears of wheat. "Reaping." "Abundance,"— in her hand a horn of plenty. "Astronomy." "The Genius of Engineering,"— in the foreground the entrance to a tunnel, in the distance an aqueduct. "The Telegraph,"—personified by a flying Mercury. "Sea, River and Lake" as highways for commerce, and contributing to trade by fisheries and maritime industries. The sea represented by a Nymph on a sea-horse,— in her hand a miniature paddle-wheel; a river, as means of transportation; the walls of a city on the river-bank; lake with fish, water-fowl, etc. "Trade in Live-Stock" and the supplying of the markets; in this instance the figures of a Greek bas-relief were followed in the drawing. "Manufacture in Metal,"—Vulcan at his forge. Call-Board Hall: "Agriculture," "Mechanics," "Strength," "Courage," "Enterprise," "The Merchant," "The Sailor," "The Poet," "Art," "The Law," "Commerce," "Education." These twelve are represented by individual heads.

As an entirety, these designs represent the capability of the United States for the production of stained glass; and though each artist represents novel and artistic features, the designs having all been confined in scope to a limited cost, they can in no case be held as a sample of the best work of the firms they represent.





DESIGN FOR A CITY RESIDENCE, by W. L. B. Jenney, Architect, Chicago.

French Architecture in America.

A DESIRE for novelty is a characteristic of the present age. Fashion is not confined to articles of dress, but extends to the serious matters of life and has reached architecture. After the selection of a Gothic design for the English House of Parliament, the Gothic style became the fashion in England, and soon the architects in America as well as England were working to adopt the early English or thirteenth century Gothic to modern wants, and they were meeting with much success; the style had belonged to the English-speaking people in the best period of their arts, was well suited to the climate, and was easily adapted to the wants of the same people six hundred years later, both at home and in the northern states of America.

American architects had sought the advantages of the professional schools, at home or abroad. The numerous professional publications spread before them illustrations of the best work of the period. A marked improvement took place in American designs, and for the first time it looked as if the United States was to have a national style, original in its developments if not in its conception. Unfortunately just at this moment the desire for a change introduced a new fashion, and then we had Queen Anne and Colonial. Any style in able hands will, after a time, become artistic, and soon some beautiful cottages were built in these styles, for which they seemed eminently adapted, though they lacked the quiet dignity necessary for the lofty business blocks in our great cities, and it is probably for this reason that the architects are now looking to France for a style adapted to these important city buildings.

The love of the picturesque and the desire for novelty, stimulated by a growing artistic taste and a general desire among the better educated for something pleasing and original, has greatly improved our architects, forcing them to study, and better still, to think, so that whatever style comes to the front, it will now fall into the hands of able and educated men who will ere long make it their own.

We have reason to congratulate ourselves that fashion has taken so sensible a direction as toward the French school, the result of four centuries of the study and practice of the ablest architects, assisted by such schools as that of the "Beaux-Arts," and illustrated by numerous and voluminous publications covering the entire period. There are many types of French art: the Classic, the Romanesque, the Renaissance, the Round Arch Gothic of central France, and even the pointed style. These, with many modifications worked out under the influence of French genius, is what is termed the French school. There is certainly variety enough to suit even the most advanced idea of the present day, that each building erected should possess its own special characteristics, and as little as possible resemble any other building ever erected.

The French school, in its broadest sense, embraces all styles; sometimes produced with as much purity as the requirements will allow, at others treated with great freedom and with marked French characteristics.

The type that seems likely to reappear on this side of the Atlantic as a starting point for a new fashion, particularly for important city buildings, is that adaptation of the Classic Renaissance so characteristic of the French school since the beginning of the last empire. There are two types,— one with the orders, and much enriched with sculpture; the other astycar, with less enrichment and often very simple.

It is not to be supposed that our architects are to blindly copy French designs. The climate of Chicago and the West is not that of Paris, nor are the requirements identical. We must not forget that much of the ornamentation so profusely used in Paris was designed for a soft, light-colored stone, that would soon be disfigured by our sooty atmosphere, even if our more expensive labor did not *make* it too costly. Fortunately our architects are now in the habit of thinking for themselves, and will soon adapt the French style to our climate and materials; and if they can only have time before the fashion changes again they will make the style as much their own as they did the English Gothic, or the so-called Queen Anne, which, for a time at least, must be preserved for cottage architecture, to which it is well adapted, and where it has produced a thousand picturesque pleasing effects that Queen Anne never dreamt of.

Architectural and Building Notes.

In the ventilation of the immense trade-room of the new Chicago Chamber of Commerce the air will be completely changed each five minutes.

The new Panorama building is being rapidly pushed and most of the contracts have been let. Indiana pressed brick will be used, furnished by Hinchliff & Owen.

P. B. Wight, of the Wight Fireproofing Co., has taken the agency for the handling of Wilcock & Co., of Leeds, England, enameled brick. They are largely used for wainscoting and tiling.

The Cincinnati bricklayers have made arrangements for the season with the master masons, having agreed to a schedule of $4.50 a day for ten hours a day, except Saturday, which will be one hour less.

Architect Buffington is constructing a fine building for the Minneapolis *Tribune*, which will be thoroughly fireproofed by the Wight Fireproofing Co., of Chicago.

All mahogany darkens in color on exposure to the atmosphere, but it is a favorite trick to stain the lighter varieties with an alkaline wash in order to give them a darker tone.

A prominent resident of the west side is about to build a residence with walls of bluestone from Cheat River, W. Va. It is the first time this fine stone has found a market here.

Oolitic limestone from the Avoca quarries, near Bedford, Indiana, is largely used in the West for foundation and cut-stone purposes, and is one of the best of limestones. It is quarried and cut by Messrs. Thomlinson & Reed, of Chicago.

It has been suggested by architects that a test of the bearing strength of the different pressed brick in the Chicago market be made the reason why a knowledge of this would be valuable, being the desirability of using pressed brick in piers and other places where extraordinary weights have to be carried.

A meeting of the New York State Board of Health was recently held in New York city to consider the resolution of the Legislature asking whether water-gas was injurious to health. The question was referred to the public analysts, and upon their report the board based a reply to the resolution, to the effect that water-gas, as ordinarily used, was not more dangerous to health than other illuminating gases.

Architects Addler & Sullivan are constructing a residence for Martin Barbé on Prairie avenue and Twenty-third street. It is 39 by 60 feet, two stories and basement, brick and terra-cotta, with red slate roof. It is modern in treatment, and the cost will be $20,000. These architects are busy on numerous plans, details of which will be given as soon as arrangements for their construction are completed.

Building in southern cities is reported to be very brisk. In Atlanta, Ga., there are about $2,000,000 worth of new buildings in the hands of contractors and architects, besides the new capitol, which will be started during the spring. Heavy sums are being invested in private residences. In Macon, contracts for over $500,000 worth of new buildings have about been closed out, giving a new appearance to the city.

That the Royal Insurance Company's building is to be thoroughly fireproofed is evidenced by the amount of this material being placed by the Pioneer Fire-Proof Construction Company. It includes hollow-tile floor arches and partitions, fireproofing of roof, ceilings, columns, girders, and concreting. This company are also placing the remainder of the fireproofing of the Board of Trade building, consisting of six-inch and twelve-inch tile arches and hollow tile partitions. There will also be a three-inch hollow-tile wall under the skylight over main hall, supporting the trusses forty-two feet high. No other method would be fire-proof and hold the weight, and is a remarkable example of the possibilities of hollow tile.

The Master Plumbers' Association, at a meeting held in this city in the early part of the month, reported a plan for purchasing a site and erecting a building for the use of the association. The plan contemplates the purchase of a site at a cost of about $15,000,— the money to be raised the first year; the second year to erect a building to cost another $15,000; the whole amount to be raised by shares issued by the association at $10 each. The rental of the building is expected to bring in about $3,000 annually, besides expenses. Such a building would give the association assembly-rooms, library, laboratory and show-rooms. At the meeting, thirteen delegates were appointed to attend the National Association meeting to be held in Baltimore in June.

New York is to have an office-building that will equal if not exceed in importance the Pullman offices in Chicago. A New York exchange says: "Perhaps the finest office-building in the world is now being erected at Nassau and Liberty streets, New York city. It is a mass about 180 feet square and thirteen stories high. It contains nearly 200 offices of from one to half-a-dozen rooms, and the tenants will be favored mortals. The elevators take but one minute to rise to the thirteenth story, and their movement cannot be felt when your eyes are closed. From the six or seven upper floors the whole of New York and both rivers are in view. Every office is heated by steam, lighted by incandescent electric lights, and furnished with hot and cold water. The top floor is fitted up as a complete hotel, containing a large restaurant, where many of the 1,000 inhabitants of the building will take their meals, a reading and writing room, a complete library with librarian, telegraph office, telephone exchange, and a large number of bedrooms for men detained down-town all night—the first building in the city in which this convenience has been offered. A busy man could live for months in it without going outside. He would have his choice of banks, of insurance companies, of business, of restaurants, and of bedrooms, right there under that one roof."

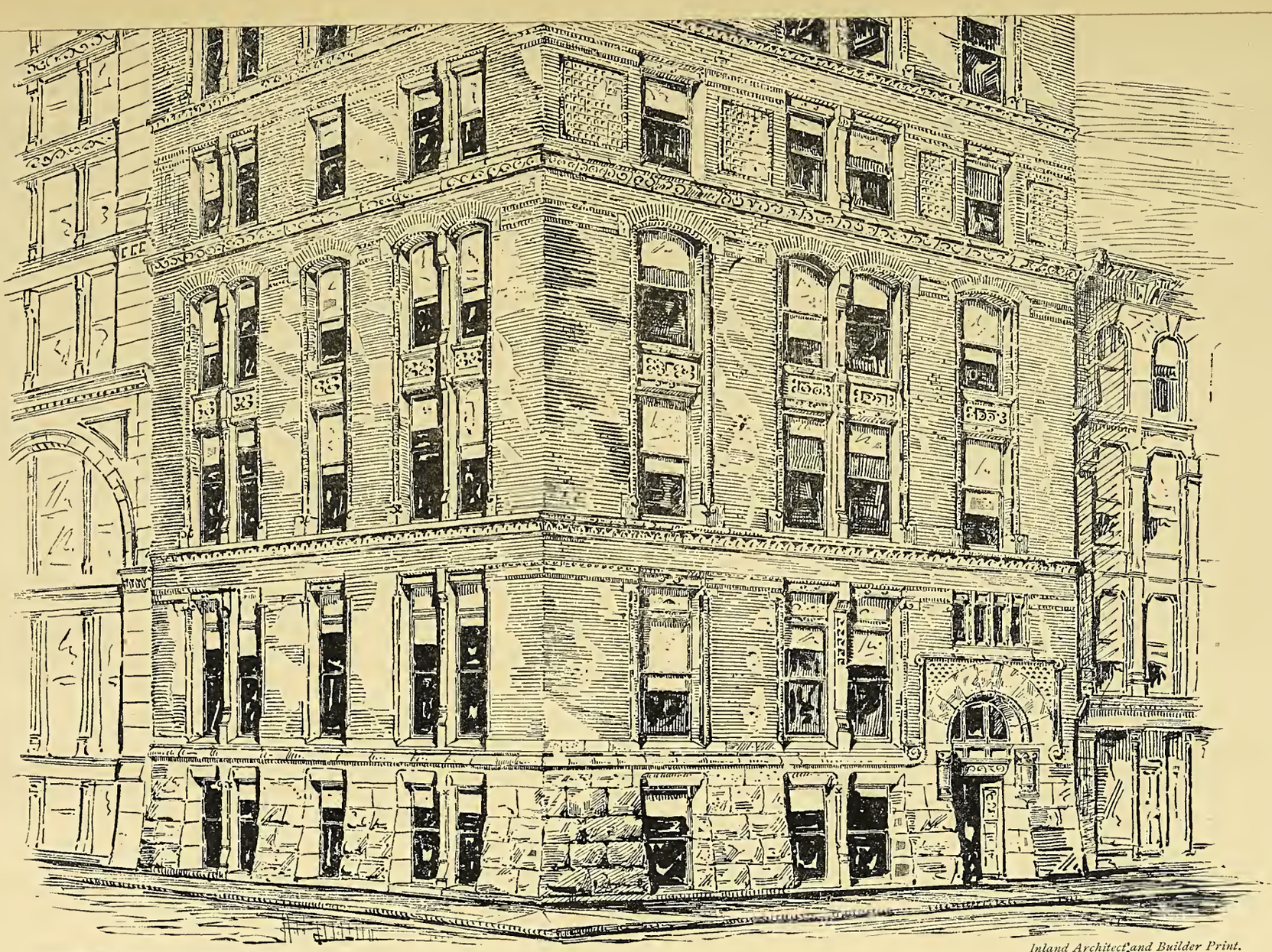
Our Illustrations.

Supplement. The Counselman Office Building, Chicago; Burnham & Root, architects. (For description see page 39.)

Page 35, wrought-iron details of choir-screen in Cathedral at Seville, Spain, and porch of house at Seville, sketched by I. K. Pond. (See article, page 34.)

Page 37, elevation and plans designed for a city residence in the style of the French Renaissance, by architect W. L. B. Jenney. (See article on page 38.)

Page 41, elevations and plans for two-story frame cottage, by architect Julius Huber, Chicago. This house, for which contracts have been let, will cost $2,300, including mantels, grates and furnace. The interior and other details will be given next month.



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COUNSELMAN OFFICE BUILDING, CHICAGO.—Burnham & Root, Architects.



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COUNSELMAN OFFICE BUILDING, CHICAGO.—Burnham & Root, Architects.

The Counselman Building.

That Chicago, through her architects, is acquiring a complement of office structures that are not surpassed in any other city, is evidenced by those lately built, illustrations and descriptions of which appear in these pages. The latest building of prominence to near completion is the ten-story structure, by architects Burnham & Root, for Chas. Counselman. The lot is 46 by 60, and for this comparatively small area of ground the architects have planned a building that can be called a model in every sense of the term. The exterior is of rockfaced Jonesboro rose granite to the second story, with Anderson pressed brick and terra-cotta ornamentation above. The extreme simplicity of the exterior design is in accordance with the disposition of our best architects to dispense with all superfluous projections, whether for ornament or otherwise, and seek effect in strength and massiveness and utility in giving all possible advantage to the lighting of the interior. This, in the Counselman building, is carried out in a high degree. But aside from its excellent interior arrangements, it is in the absolute fireproof character of this structure that its chief value lies, and not alone in this particular structure, but in all those recently projected, this feature has largely entered, and though in many cases, in not so thorough a degree as in the Counselman. The entire ironwork in columns, beams, girders, vault linings, etc., is covered with porous tile, the floor arches are of eight-inch hollow tile, the partitions of three and a half inch hollow tile, the roof and suspended ceilings under the same are of this material, while the bases. etc., are of Portland and Keene's cement, and the roof is covered with glazed flat tile laid in cement. The stairways are of iron, and in its entirety this building is as non-combustible as a building can be made. Situated as it will be, surrounded by the Board of Trade building, the Royal Insurance building, and other structures equally high, if not higher, the design of the building is singularly well adapted to the location, and confers great credit upon the architects.

Lumber Notes.

Manufacturers on the Saginaw river are asking $3.65 per thousand to contract No. 1 shingles.

It seems to be the universal opinion that the new crop of logs will average much better in size and quality than the cut of several preceding years.

The largest sale of shingles ever made on the Saginaw river was that recently closed by J. S. Hall, to Smith, Fassett & Co., of Tonawanda, N. Y., whereby the latter firm purchased of him 35,000,000.

Estimates place the number of surplus logs in the Beef Slough Company's booms available for rafting at 40,000,000 feet, and, unless low water interferes, the company will raft upward of 450,000,000 feet.

There will be ninety steamers and sixteen hundred men employed in the transportation of logs and lumber down the Mississippi next season, from the mouths of the St. Croix, Black, Wisconsin and Chippewa rivers.

The extent of the operations of the Ontonagon Diamond Match Company may be partially understood when it is realized that that concern harvested about 30,000,000 feet of logs at their camps during the winter just closed.

Reports from the grand Traverse (Mich.) district are to the effect that the hardwood logging season has been unusually successful there, most of the mills securing a crop equal to their full capacity, and hence the output of hardwood lumber in that region it is expected will be unusually large.

The pine of the Northwest is going rapidly also, and its place in time will have to be supplied with the cheaper classes of hardwoods and the cypress and yellow pine of the states farther south. In view of these facts, Cincinnati and Louisville are already regarding themselves as the future great lumber distributing points.

The Hudson Lumber Co., of the St. Croix Valley, Wis., completed their mill late last season and manufactured 6,000,000 feet. This year they intend to saw 15,000,000 to 20,000,000 feet. They ship by raft or rail. They have just completed a fine new planing-mill, and can furnish all grades of lumber, lath and shingles. They have a good dry stock on hand.

The large majority of the 6,000,000,000 feet of pine lumber produced in the states of Michigan, Wisconsin and Minnesota is controlled by not exceeding one hundred and fifty men or firms, and it is a very simple proposition that a little co-operation between these one hundred and fifty firms would put the log production and lumber market under some sort of control, but it doesn't seem to work that way.

Mr. C. R. Van Osdel, of Chicago, has completed his contract for building six dry kilns, under the Wood patent, for the Bohn Manufacturing Co., of Winona. Their old Curran & Wolf kiln, of three years' standing, has been destroyed and its piping placed, as far as it went, in the new kilns. Mr. Van Osdel is also completing two new dry kilns for the Detroit Stave and Heading Works, of Detroit Junction, Mich.

Rosewood and mahogany for furniture are gradually coming again into large use. Five cargoes of mahogany arrived at New York week before last and all were quickly marketed. An exchange says that the time is not distant when New York will be the largest mahogany receiving port in the world. This is a commentary upon the changes that have taken place within a comparatively short time. It is but a few years ago since half a dozen cargoes arriving in a month would have overstocked the market. Now as many as that in a week makes no impression on the market, and all that comes forward is quickly absorbed.

New York *Sun*: "When a forest fire occurs in the pineries of Michigan," said a lumber operator from that state, "the pine trees on the burned tracts must be cut within a year if the owner wants to get marketable lumber out of them. The heat of a spent forest fire is not yet out of the air before millions upon millions of large, brownish-white moths appear. One hour there may not be a moth anywhere about; the next hour the air will be filled with them. They lay the egg that produces a worm that bores into pine trees, honeycombing them with tunnels that ruin them in a few weeks. I have seen these millers covering an area of 10,000 acres of burned woods. When the rebellion broke out forest land could be bought in Michigan for less than $2 an acre. I purchased five thousand acres in 1860 for $9,000. Last month I sold the tract for $250,000. I think the biggest pine tree in Michigan is on that property. It is eleven feet through at the butt, and must be one hundred and fifty feet high. A New York man once offered me $100 for fifteen feet of the trunk from the ground up. He wanted to exhibit it during the Centennial Exhibition in Philadelphia. I refused the offer. Michigan now produces one-quarter of the pine used in the country. Over $160,000,000 a year is received by the operators for the product of her forests. In ten years from now, however, there will be very little, if any, pine left in the state."

Mosaics.

The patent reflectors for gas, kerosene, electric or day light, of which Mr. I. P. Frink, 551 Pearl street, New York, is the patentee, are standard goods and are in general use.

Mr. George W. Murphy, the representative of the Smith & Egge Manufacturing Company, of Bridgeport, Conn., is preparing to exhibit here a special line of plumbing goods made by the E. Stebbins Manufacturing Company, of Springfield, Mass.

The brickmakers of this country last year consumed three million cords of wood, the product of fifty thousand acres of average timber-land. A large part of this immense expense could have been saved, with a proportionate increase in the profits, by the use of improved methods in firing.

The March number of The Inland Architect and Builder, a monthly journal devoted to architecture, building and decoration, contains a large amount of reading matter, and is a model of typographical art. The illustrations are especially fine, and the periodical may be said to be a credit to the publishers.—*Chicago Tribune.*

The journeymen plumbers of this city have submitted to the Master Plumbers' Association a proposition, which was accepted, that all disputes arising between employers and employés be settled by a committee of arbitration. This is a move in the right direction, and the journeymen are entitled to credit for adopting this course to settle any disputes that may arise between them and their employers.

Thos. Kelley & Bro., of Chicago, have received the contract for the plumbing work for the Georgia State Capital building at Atlanta. This firm will move from their present location on Dearborn street to 75 Jackson street, where they are fitting up office and showrooms where they will exhibit their plumbing supplies. They are the only plumbing firm in the ountry who exhibit their own inventions exclusively.

The illustrated catalogue of the wood-working machinery manufactured by J. S. Graham & Co., Rochester, New York, exhibits in a very attractive manner all the varied wood-working machinery manufactured by this well known firm. The catalogue shows upward of forty machines manufactured by them; machines for almost every conceivable purpose in the cutting of wood into every possible shape by which it can be used to advantage.

Martin's patent automatic passenger elevator is designed especially to meet a long recognized want in private houses, and since in these days no plans for residences seem to be complete without provision for putting in an automatic passenger elevator, those manufactured by the Chicago Parlor Elevator Co., at 51 and 53 W. Lake street, seem to be just the thing. Their passenger and dumb waiters seem to meet pretty fully every possible demand for hoisting purposes.

In a recent number of the *Deutsche Bauzeitung* Dr. V. Ehmann gives a statement of his favorable experience in the use of galvanized-iron pipes for the distribution of water in Würtemberg and in the villages of the "rauhe Alp." The water is delivered, in many cases, under a pressure of from six to eight atmospheres. Pipes which have been in use for a number of years showed only a slight incrustation, and the coating of zinc was apparently intact. No analyses of the water passing through the pipes are given.

Raymond's compressed lead sash weights (with wrought iron fastenings), solid, compact, noiseless, are made under hydraulic pressure, thereby securing a greater solidity and density of metal and a smoothness of finish not found in the old style of cast weights. The wrought iron rods run completely through the weight and are securely fastened at the lower end. The linked weights are very convenient for placing in and removing from pockets with small openings, and will be readily appreciated by the trade.

The Moule earth closet, as greatly improved, is giving most excellent satisfaction wherever used. It has come to be regarded as almost indispensable wherever there are not stationary conveniences in the house; and in respect to smell, "modern improvements" are rarely as satisfactory. "Nothing," says an excellent authority in speaking of these earth closets, "can be more effectual, and its use has every sanitary advantage." Descriptive circulars may be had from Myers' Sanitary Depot, 94 Beekman street, New York city.

Messrs. Orr & Lockett are the Western agents for a device for the opening and closing of outside blinds that cannot but come into general use, because of its utility and simplicity of action. It is called the Dudley Blind and Shutter Worker, made by a company of that name, of which C. S. Kempton, of New York, is manager. It prevents all slamming and rattling of blinds. It is strong and durable, and has many other admirable qualities besides that of enabling the opening and closing of blinds without opening the window.

The patent heat-saving and ventilating grate manufactured by Edwin A. Jackson & Bro., No. 77 Beekman street, New York, has deservedly attracted wide attention. Its merit is based upon the fact that no ven-

tilators are required where this grate is used. The nearer air-tight the rooms are made, the better the result obtained. The grate will keep the room filled with pure warm air, changing constantly and more or less rapidly, according to the amount of fire required. It is a perfect automatic ventilator, and equals three ordinary grates in heating power.

L. S. GRAVES & SON, Rochester, New York, manufacture screw, geared, hydraulic and hand elevators, for hotels, office and mercantile buildings, warehouses, or manufacturers' use, combining the most approved mechanical principles and patented devices for safety, durability, noiseless running and economy of power, and which are in use with the best results in so many large establishments in all our cities. They also manufacture boot and shoe machinery, shafting, pulleys, hangers and couplings, guaranteeing all their work to be of the very best that can possibly be made in their line.

OVER two hundred elevators in New York, Philadelphia, Chicago, Cincinnati and other places, attest to the value of Zimdar's patent pneumatic bells as applied to passenger elevators, which, it may seem somewhat singular to some to say, are operated entirely without the use of wires or batteries! They captured a prize medal at Paris in 1878, and also at the American Institute in New York in 1881. They are coming into general use, which is ample commendation of their real merit. They are manufactured by C. E. Zimdars, New York. L. S. Baldwin & Co. are the agents in Chicago.

EIGHT years of workshop use have demonstrated the superiority of Marston's (Boston, Mass.) hand and foot power saw, which seems as indispensable to carpenters, cabinetmakers wheelwrights and all woodworkers. These machines are in large use, and are especially the handiest for making picture frames, jewelry and cigar boxes, beehives, etc. They are well made machines, capable of doing heavy as well as light work, and on which can be done all the variety and kinds that are usually done on a steam saw table, such as mitring, grooving, rabbeting, cutting tenons, boring, etc., and with emery-wheel for grinding tools.

AT the end of the notices relative to the contractors (on the second page of the Commercial National Bank Building Supplement) of last month, the inference was inadvertently given that both the vault and bank work was done by one company. This impression we desire to rectify in the following particulars: All the fire and burglar proof vault doors and safes for the bank and for the Safe Deposit Company (except two doors), and all the boxes in the Safe Deposit Company's vaults, are furnished by the Diebold Safe & Lock Co., who furnish largely Chicago banks, also bankers throughout the country, with their security. This correction is due to the company and its vice-president and general manager in Chicago, Mr. J. W. Norris.

THE use of furnaces, universal as it is, has led to the production of many different forms, some of them combining the best known principles of heat radiation, combined with an economy of fuel consumption. One of the best, judging from practical experience during the past severe winter, is made by the Jones & Erling Manufacturing Co., of Chicago; the furnace in question having taken the place of one that belongs to a class that is quite common in Chicago houses, and which consumed the maximum of fuel and producing the minimum of heat. This furnace, in a two-story and basement house, with an ordinary amount of fuel, but with open draughts, necessitated the opening of doors when the thermometer marked 20° below zero, and in warmer weather the draught action was so perfect as to make it all that was desired. In calling the attention of architects and builders to the "Eclipse" furnace, the aim is to provide house owners with a furnace that can always be relied upon. The office of the firm is at 47 and 49 Dearborn street.

THE Portland Cement Works, "Stern" Toepffer, Grawitz & Co., at Stettin, Germany, which are represented in this country by Gustav Grawitz, at 165 and 167 Broadway, New York, were awarded a special first merit by the jury of the Sydney International Exhibition, 1879-80. The jury in making their report on the "Stern" (Star) Portland Cement say: "Of excellent quality, finely ground, produces a superior mortar, of great strength, hardness and density." At this exhibition there were six different Portland cements put to seven days' test, and the strain to which they were subjected after having been dried for twenty-four hours in the test-room, and having subsequently been kept in water six days, showed a tensile strength per square inch, neat cement, of 634.2 lbs., and of one part cement and two of sand, of 325.8 lbs., leading all the other cements nearly two hundred pounds in favor of the former, and over one hundred pounds in favor of the latter. At the exhibition in Philadelphia in 1876, the testimonial of the jury was that the "Stern" Portland Cement on exhibit had no superior.

MR. W. H. DOLMAN, of New York, is the patentee of what is becoming widely known as Dolman's Fire Damper, which is claimed to be an ample and effective device for rendering buildings fireproof for all practical purposes. It is a simple and inexpensive manner of preventing the spread of fire from one room to another, and is useful also in giving houses a cool temperature in summer and warming them in winter. It successfully prevents the fire from burning up through, or down through, wooden joists and beams, and it is claimed that it gives great security with light weight of material, and at a slight cost, thus obviating the great expense of iron joists and terra cotta filling. Public tests have been given and witnessed by prominent officials, including insurance men and members of the fire department, and all have been pleased with the demonstration; that given on the 20th and 21st ult. in Chicago being complete and thorough, the underwriters strongly recommending its use in the construction of factories, warehouses, etc., and in villages where the local fire departments are inefficient, the burning of houses would be made exceedingly rare by its use. The address of the inventor, Mr. W. H. Dolman, is care of Munn & Co., 261 Broadway, N. Y.

HEATING and heating apparatus are matters which always commend themselves to our thoughtful consideration. Everyone who has a house to live in, or who ever expects to have a home, is concerned as to the best manner in which that home is to be heated. He understands the necessity for providing a means for the perfect circulation of heat, so that his home shall at all times be pleasant and comfortable. If he is the owner of a large public building, his consideration and care for providing the best means to heat the building. Left to depend entirely upon his own judgment, he might fail to recognize the best means to provide heat, but the probabilities are that if he were to consult his architect or engineer, or examine any of the many public and private buildings in the city, he would learn that the system of heating by a perfectly circulating radiator was the one most generally adopted. The satisfaction given by this mode of heating is both genuine and meritorious. In this mode of heating, the Detroit Steam Radiator Company's Patent Cast-iron Steam Radiators are very largely in use in all our cities, and are used for heating not only private and public buildings, schoolhouses, etc., but also railroad trains, steamboats, etc., with the best results. Surely a radiator which has come into such general use, and has been so warmly endorsed and commended by those who have used them, is entitled to consideration by everyone who is in search of a perfect circulating radiator.

TILE-MAKING has become one of the fine arts. It is an old industry, dating back for centuries; but the perfection of art in the manufacture of tiles has only been successfully achieved in quite modern times. A few years ago all the really artistic tiles used in this country were imported. The European manufacturers had brought their artistic work to such a high state of perfection that the fame of their wares extended to almost every part of the world. Many a palatial home in the East was decorated with these foreign tiles. But an industry so vast as this was likely to become, was seized upon by American ingenuity and at once turned to good and profitable account. At first tile-making was confined to a few localities east. The success which attended these ventures was something remarkable, and tiles were produced in the very highest style of art, and were sent abroad, challenging comparison with those made at the celebrated works in Europe. The events of less than decade show that the progress of this branch of industry has indeed been marvelous, and the center of the tile-making industry has come to the West. Seven years ago a little establishment was located at Indianapolis, Ind., and employed only twelve hands. The industry was then small, the capital of the concern was small, and tile-making was conducted on a small scale; but from so small a beginning, the works started at that time have grown to an extent scarcely without a parallel in any industry in this country. The United States Encaustic Tile Works, of Indianapolis, employ over three hundred hands; among them skilled artisans from the best factories in the old world, as well as the best American talent. One year ago the company began the manufacture of majolica, or high art tile, and with their accustomed industry have progressed since that time at a rate that is a splendid testimonial to American enterprise. The art expressions in clay, which this company make, enhanced by their many beautiful enamels in delicate shading and handsome tints, consist of conventional and natural arrangements of flowers, ideal heads, flights of birds, and inscriptions on figured backgrounds, diaper and rosette patterns, geometrical and radiating forms, etc., in from an eighth of an inch to three inches relief. Their reputation is international. Their trade is not confined to this country alone, they having shipped goods in considerable quantities to Cuba, the Bermuda Islands and Canada. They have recently established agencies in all the large cities of South America and Mexico, and are rapidly building up a fine export trade.

Correspondence.

OMAHA, Neb., April 1, 1884.

To the Editor Inland Architect and Builder:

May I intrude a few remarks in your valuable and interesting journal in reply to a letter in the March number, from H. R. Wilson, architect?

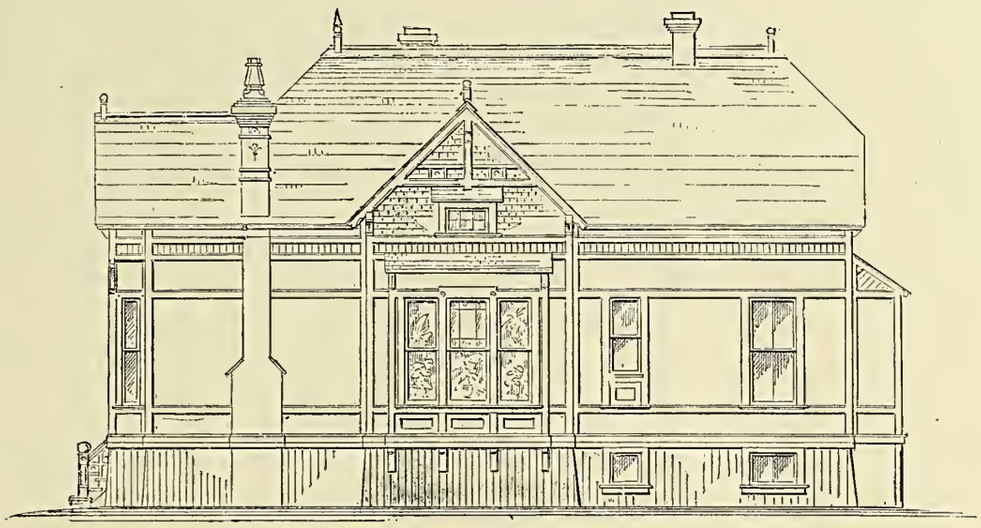
While I fully indorse all that Mr. Wilson has urged in support of his suggestion for the establishment of a society or association of architects in Chicago, may I be permitted to offer an additional suggestion — that is, to form it as a Western association, embracing the larger and fast-growing cities of the West, in which many architects of good standing and ability have located, and who from various causes are denied the privilege of attending or offering themselves as members of the American Institute of Architects in New York, would embrace the opportunity of doing so in Chicago, and thus be the means of uniting in future the men who are destined to make this the greatest nation of the earth. It will also infuse new life and energy to members of a profession who, more than any other, need unity of action and comparison or exchange of ideas. This can only be effected by the establishment of such institutions as have been advocated.

Trusting that you will bring this matter prominently to the notice of the profession, and also be the means of producing tangible results,

Respectfully submitted.

SIDNEY SMITH, Architect.

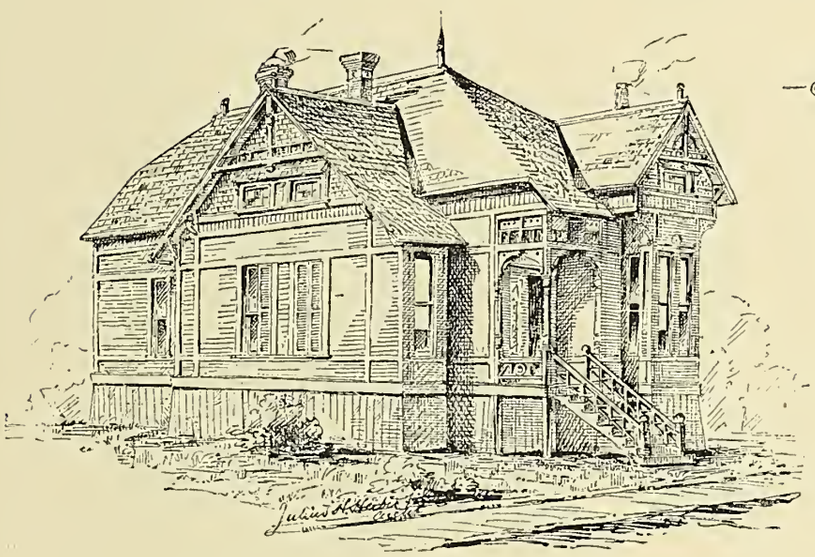
We have received other letters from architects throughout the West calling for an association of architects, and would be glad to hear further the views of members of the profession upon this subject. The forming of such an association would necessitate the thorough cöoperation of all, and, as our correspondent suggests, not of any one city, but of the entire West. While the present season's activity will not permit a large amount of thought upon the subject, we wish that architects would bear the project in mind and send us their views upon it, so that when the time for the active work of organization has arrived we may know upon whom we can rely at the outset. There is no doubt that the want of an organization has been long felt by our Western architects, but how to accomplish its formation will be a matter for future consideration.—[ED.

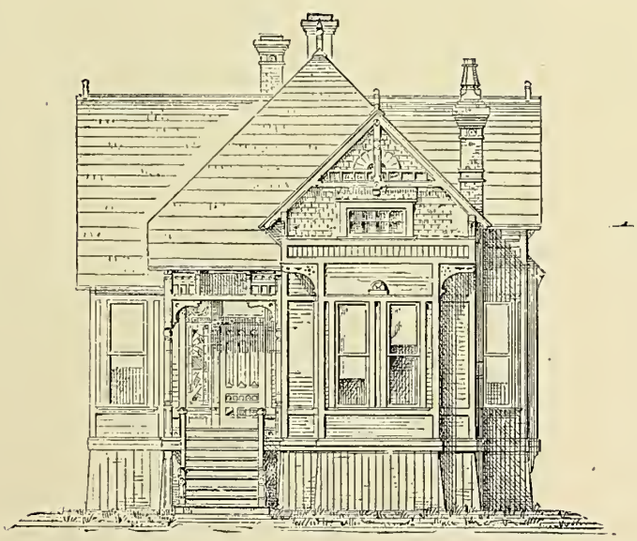


South-Elevation

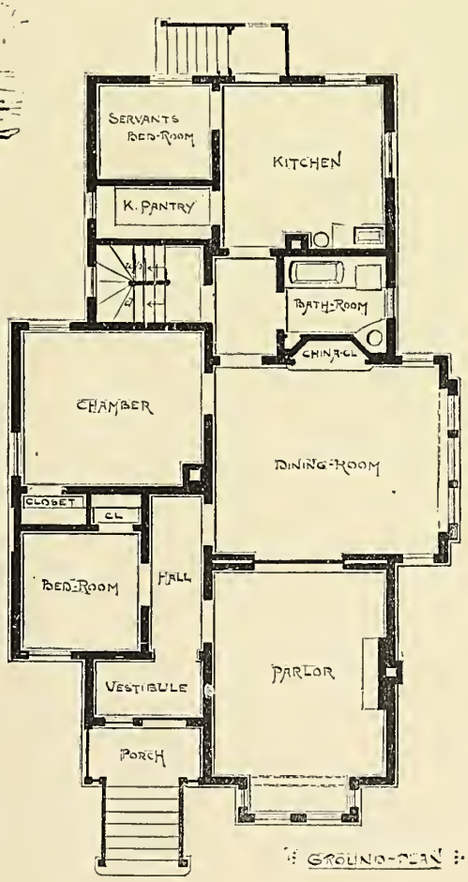
Sketch for a Suburban Cottage

Scale [illegible]





Front-Elevation



Ground-Plan

New Publications.

THE SLATE ROOFER. By D. AULD, Jr. Cleveland: AULD & CONGER, Publishers.

This useful and handy little book is specially adapted for the use of quarrymen, roofers, architects and dealers, and to such it must prove a *vade mecum*. Its contents comprise roofing, slate tables, rules for measuring slate-work, designs for ornamental work, nails required for a square, rules and information for new beginners, and much other valuable information to the trades named. It is in convenient pocket form and contains only such information as is necessary in every-day transactions of persons in the slate business. It contains a number of illustrations of slate roofing in a large variety of forms, showing how they are laid.

HOUSE DRAINAGE AS CONSTRUCTED BY THE DURHAM HOUSE DRAINAGE CO. By Wm. PAUL GEBHARD, Chief Engineer, New York.

This is another of those admirable little treatises on a question of so much sanitary importance, and which the attainments of the author have eminently qualified him to write about in a clear, practical way which is peculiarly his own. The title of the book is sufficiently explanatory to render it unnecessary to mention details, even did space permit. The entire question of house drainage is discussed as constructed by the Durham system, which, it must be admitted, is one of the most thorough in use. The architect, the builder and the plumber will find much to interest and instruct them in the pages of this little pamphlet, and all who contemplate building can be profited by its perusal.

THE ILLUSTRATED CATALOGUE B, issued by the J. L. Mott Ironworks, New York, is a book in pamphlet form which can be profitably consulted by everybody who contemplates building a house either for public or private use. Patent washout closets, flushing rim earthenware, and enameled iron hoppers, cisterns, service boxes, flushing tanks, etc. etc., are all handsomely illustrated and explained. The company is one of the most extensive in its line of manufacture of any in this country, and the articles they manufacture are the very best and are in extensive use. Their illustrated Circular A is "The Bathroom Illustrated." They are the sole importers of the "Imperial Porcelain Baths," which are specially manufactured for them in England; besides they are extensive manufacturers of all kinds of porcelain-lined and other baths.

The Art Interchange of March 27 contained two colored studies by Miss Caroline Townsend—one suitable for decorating a hand-bag, and the other a border for stenciling or embroidery. A beautiful design for ceiling decoration also appeared in that issue, as well as a study of a toad, designs for a set of fruit d'Oyleys, several designs for small articles in brass repousse work, designs of thistle for cup and saucer decoration, and a panel design of humming-birds. Published by William Whitcock, 140 Nassau street, New York. Sample copy on receipt of ten cents. *The Art Interchange* of April 24 will contain a beautiful design in color (13 by 13) of a female head for plaque decoration. It is unlike any decorative head heretofore offered for sale. Against a delicate blue background is shown the nearly profile view of a blonde, whose light hair is ornamented by a band of marguerites. The head was painted by the well-known artist Mrs. Mary B. Odenheimer-Fowler. In addition to this charming design there is to be an admirable study (in black and white) of a cat's head and paws, suitable for panel or banjo decoration. Several designs for brass repoussé work. Excellent working drawings for a carved wood mantel and top, and a beautiful design of swallows for cup and saucer decoration, are among the other attractions of this issue. In the valuable Note Query and Answer Department, there will be given instructions on artistic home furnishing, decorative novelties, schemes of color for decoration, suggestions for wall and window hangings, carpets and upholstery, painting in water, oil and mineral colors, embroidery notes, and suggestions for brass repoussé work. In short, the *Art Interchange* of April 24 promises to be one of the most attractive issues of this valuable art journal.

FOUNDATIONS AND FOUNDATION WALLS FOR ALL CLASSES OF BUILDINGS, Pile-Driving, Building Stones and Bricks, Pier and Wall Construction, Mortars, Limes, Cements, Concretes, Stuccos, etc. 64 Illustrations. Practical explanations of the various methods of building foundation walls for all kinds of buildings; tables of the weight of materials, etc.; the kind of materials used, the load sustained, and the size of wall piers, etc.; the use of piles in foundations, with terms, etc.; plastering, mortars, limes and cements. Extracts from New York building laws, with notes, by Geo. T. Powell, A. and C. E., New York; to which is added a treatise on foundations, with practical illustrations of the method of isolated piers as followed in Chicago, by Frederic Bauman, architect. Revised and enlarged by the addition of much new matter, by G. T. Powell. WILLIAM T. COMSTOCK, 6 Astor Place, N.Y., publisher. Price $2.

The subject of foundations, their preparation and construction, have in the past received very little attention from practical writers. The reason has been, perhaps, not so much because of a dearth of knowledge on the subject, but because the knowledge was in the hands of men more used to working out problems with their hands than transferring them to paper. The result has been that experience has been almost the only teacher, and the number of cracked walls, and structures on the verge of tumbling down, of which every large city can "boast," evidences the fact that in such cases, as is usual, experience is a costly teacher. Each locality has its own pecularities of soil, and the experience gained in one section is often comparatively useless in another. In the volume under consideration the author has wisely confined his remarks to the two largest building points in the United States, and has given in a brief and concise form some of the more important facts. The book is also valuable for its directions in the handling of cements, concretes, mortars, etc., and, as a whole, will doubtless prove a valuable book in the hands of architects or contractors, not alone in New York and Chicago, but everywhere.

THE GLASS DEALER'S READY RECKONER; consisting of a series of tables of Superficial Measurement, calculated from 1 to 132 inches in width, by 2 to 180 inches in length (1 by 2 to 132 by 180). Compiled and published by JOHN THORPE, 243 Broadway; P.O. Box 986, New York. Price $1.50 each, or four books for $5. Will be sent by mail, postpaid, on receipt of price (money or P.O. order).

This book contains 132 pages of solid figures, and though each page is entitled "Superficial Measurement," it is not to be supposed that any of these pages are superficial, but that the work is perfectly adapted to the purpose for which it is intended.

THE AMERICAN FURNITURE GAZETTE. Chicago: DE BERARD PUBLISHING CO.

This publication (monthly), in the interest of the furniture trade, has been making rapid strides of late, and it deservedly occupies a foremost place as one of the very best trade publications of the day, each succeeding number seeming to be an improvement upon its immediate predecessor. The general furniture trade, both east and west, seems to appreciate the efforts of the publishers to furnish the trade with a first-class publication, and its pages afford ample evidence that it is in the hands of its friends, who are sustaining it by a very liberal advertising support. It is always a welcome visitor among the furniture trade. It comes out this month in a new dress and even a more pleasing and artistic form than formerly.

Inventive Genius in Building.

294,524. Capped Wood-Screw. Edward Stiemke, Milwaukee, Wis.
294,535. Speaking-Tube Annunciator. Joseph Walter, New York, N. Y.
294,573. Fastening Device for Doors. John E. Bozell, Tipton, Ind.
294,626. Bank-Vault. John T. Hough, Chicago, Ill., and John A. Harper, Pittsburgh, Pa.
294,647. Illuminating Tile. Jacob Mark, New York, N. Y.
294,665. Roofing Composition. John F. Perry, Chicago, Ill.
294,674. Water and Steam Cock or Faucet. Jos. Richter, Cincinnati, O.
294,676. Process of Preserving Wood. William W. Robinson, Ripon, Wis.
294,724. Router-Plane. Henry P. Cope, Detroit, Mich.
294,762. Ratchet Bit-Brace. William R. Clarkson, Buffalo, N. Y.
294,773. Ventilating-Damper. John P. Dorr, Neenah, Wis.
294,774. Sash-Fastener. Frederick Eberlein, Chicago, Ill.
294,777. Wood-worker's Dog. John Forbes, San Francisco, Cal.
294,785. Door-Spring. William W. Jackson, Chicago, Ill.
294,822. Knob-Attachment. Oscar Stoddard, Detroit, Mich.
294,842. Electric Door-Pull. Charles Beile, Brooklyn, N. Y.
294,855. Siding and Ceiling for Buildings. George W. Crawford, Davenport Centre, N. Y.
294,866. Stone-dressing Machine. Essington N. Gilfillan and Samuel P. McKelvey, St. Louis, Mo.
294,905. Pneumatic Door-Check. Gustavus S. Perkins, Hartford, Conn.
294,914. Planing-Machine. James A. Roberts, Detroit, Mich.
294,917. Mechanism for operating Doors of Buildings. Hamlin J. Shaw, Somerville, Mass.
294,919. Bench-Plane. Jacob Siegley, Wilkesbarre, Pa.
294,949. Manufacture of Wrought-Iron. Christopher Zug, Pittsburgh, Pa.
294,985. Gauge Attachment for Boring-Bits, etc. John Fuller, Sr., Seneca, Kans.
295,010. Water-Closet. Stanton M. Howard, Wheeling, W. Va.
295,019. Brick-Machine. Lewis B. Kennedy, Keokuk, Iowa.
295,026. Brick-drying Kiln. Benjamin G. Lockett, James W. English, and John W. Murphey, Atlanta, Ga.
295,040. Steam-Radiator. Dr. F. Morgan and John Robb, Akron, O.
295,067. Dovetailed grooved Brick for Building Purposes. George E. Stearns, New York, N. Y.
295,100. Combined Bevel and T-Square. Stephen H. Bellows, Athol, Mass.
295,142. Sash-Fastener. Henry H. Asimont, Duluth, Minn.
295,163. Window-Screen. John A. Grove, Bluffton, Ind.
295,166-168. Skylight. Geo. Hayes, New York, N. Y.
295,173. Lath-sawing Machine. Wm. E. Hill, Kalamazoo, Mich.
295,196. Mortar-Mixer. Wilhelm Prochnow, Milwaukee, Wis.
295,253. Sash-Holder. Thomas Brown Jones, Hiawatha, Kans.
295,258. Automatic Rain-Water Regulator for Cisterns. Frederick E. Lord, St. Louis, Mo.
295,269. Trestle for Scaffolding. John T. Miller, Memphis, Mo.
295,283. Metallic Roofing-Shingle. Ephraim B. Repp, New Windsor, Md.
295,284. Lumber-Drier. Lafayette Rollins, Mountain Creek, Ala.
295,343. Steam-Radiator. Robert Brass and John Chapman, Brooklyn, N. Y.
295,351. Vise. William H. Cloud, Detroit, Mich.
295,389. Scaffolding. John Thomas Haskell, Norwalk, O.
295,418. Apparatus for drying Lumber. Aaron S. Nichols, Pullman, Ill.
295,461. Seat for Public Buildings. George H. Thompson, Plattsmouth, Neb.
295,501. Door-Hanger. Edward Y. Moore, Chicago, Ill.
295,507. Door-Check. John Y. Runyan, Flint, Mich.
295,537. Weather-Strip. Eugene E. Gillett, Western Union, Wis.
295,558. Brick-Machine. Phillip Henry Kells, Adrian, Mich.
295,582. Handle for Dial-Lock Knobs. Tracy L. Paine, Milwaukee, Wis.
295,630. Sash-Balance. Mahlon B. Gladman, Hopkins, Mo.
295,667. Lumber-Kiln. Ephraim Myers, Suspension, Ala.
295,678. Safety-Stop for Elevators. Ellison Saunders, Austin, Tex.

Synopsis of Building News.

Bloomington, Ind.—The outlook is most favorable, and the prospects are that a large amount of building will be done during the ensuing season. Good mechanics are scarce.

Architect J. L. Nichols: Two two-story houses, brick and stone, slate roofs, one 64 by 70 feet, the other 113 by 86 feet, to cost together $60,000. For Christian Church, one-story brick and stone, slate roof, 104 by 67 feet, to cost $13,000. For Hully Showers, two-story frame, 67 by 58 feet, to cost $7,000. All the above under way; builders Nichols & Son. For J. W. Bryan, one-and-a-half-story frame, 35 by 38 feet, to cost $1,100. For Ben Rogers, one-story frame, 40 by 43 feet, to cost $1,200. Last two contracts not let.

Cedar Rapids, Ia.—The outlook for this place is exceptionally good, and the prospect is that a larger number of important buildings will be erected this season than in any previous one. There is some chance of a scarcity of brick in the early part of the season. It is a little too soon yet to judge of the labor supply.

Architects Josselyn and Taylor, trustees Coe College, an addition to Coe College, Cedar Rapids. Three-story and basement, walls brick and stone, shingle roof, 62 by 42 feet, to cost $15,000; contracted; A. H. Conners, builder.

Chicago, Ill.—The weather has, for the most part, not been as favorable as architects and builders could desire, being too cold and wet. Consequently new building projects have been somewhat delayed. But there has been a still more serious difficulty in the way—one to which allusion was made in our last issue—and that is the great scarcity of common brick. Enormous as is the aggregate capacity of the yards in this city and the suburbs, there has been no brick to be had, and many building projects under way, which have already been contracted for, will have to remain in statu quo until the new brick crop, so to speak, is ready for the market. Many large buildings that are under cover are being rapidly pushed to completion, and several of the finest of these, already fully reported in these columns, will approach completion by the 1st of May. The trouble in regard to brick will not be of long duration, unless trouble arises in other quarters. There are indications that serious disagreements may arise between employés and employers, outcroppings of which have become manifest during the past week or ten days. Notwithstanding the large number of building permits issued since the opening of spring, and the brief lull at the Building Department, for reasons already given, a walk around among the architects could not fail to convince anyone that they are about the busiest men in the city. Their boards are full of work; in some instances the working force has been increased, and good draughtsmen have been in some request. The large commercial building projected by Marshall Field, will probably be put under way at an early day, as it is understood that Mr. Beman, the architect, has been directed to proceed with the plans. This building, as previously noted, is to be eleven stories high, and will occupy the now vacant valuable lot at the southwest corner of La Salle and Adams streets. An important development since our last issue is the official announcement from New York that architect W. L. B. Jenney, of this city, had been chosen architect for the magnificent new office-building to be erected at the northeast corner of La Salle and Adams streets, for the Home Fire Insurance Company of New York. The structure will be eight stories and basement high, of pressed brick,

elaborately trimmed with stone, and will be one of the handsomest and most imposing edifices on the thoroughfare. Mr. Jenney is in a position to be congratulated, as he was chosen from among more than half-a-dozen of architects of acknowledged ability of the city. The buildings on the lot are now being removed, and the work of construction will soon be begun.

There is to be a continuation of last year's street paving operations on an extended scale this season, and wood and granite will be the principal material used. On the south side the paving of Clark, Madison, Wabash avenue, Randolph and Lake streets will be done with granite blocks, a paving which seems to meet the views of the property owners along these streets as being the most substantial. Clark street is now torn up by the laying of the large mains of the Chicago Gas Light & Coke Co., and the granite paving will soon follow. This same company has already petitioned the council for the privilege of tearing up some of the streets which were so substantially laid with granite last year, but have so far been refused the sanction of Commissioner Cregier to any such vandal operation. To tear up the granite blocks laid only last year would completely ruin the streets, and as the contractors have guaranteed these pavings for five years, the proposed work of the gas company, if carried out, would relieve them of all further responsibility. The gas company seems to entertain very little regard for the public in this matter. The new gas company laid its mains before the streets named were paved. The old gas company simply want now to put down larger mains. The public understand that its mains on all the leading thoroughfares are quite large enough. It is to be hoped that Commissioner Cregier will remain firm in his determination to protect the newly-paved streets, and not allow a company that in the past has shown so little consideration for the rights of the public to continue its unreasonable destruction of public improvements, especially when a better quality of gas, and enough of it, is available with no further inconvenience to the public.

The real-estate reporter of the Chicago *Tribune* has this to say in regard to the "whitening" of brick walls, which, here and there, when a wall is finished, may often be seen in various parts of the city. He says: "While wandering about the other afternoon with a friend of mine, who is an old contractor and builder of the city, I made some inquiry about the cause of the white exudations that disfigure so many fine building fronts in Chicago, and have so long proved so vexatious to architects and builders, not to mention the owners of houses. My friend said there had long existed a popular impression that the white saltpetre or magnesia crystals came from the face brick or stone veneering of the houses, but that it had recently been ascertained that the entire trouble arose from the common mortar or brick backing of the front, the lime or cement in each being strongly impregnated with sulphate of magnesia, which had come to be known as saltpetre. It seems that the discovery was made by placing some tarred felt or paper between the common brick and mortar and the veneering, which entirely prevented the magnesia from reaching the front. He showed me several buildings in which the felt had been used by himself and others with the very best results, no white substance whatever appearing. In addition to the good the tarred substance does in this direction, it also serves to keep the interior of the house perfectly dry and warm. In view of the great discomfort experienced on account of the discolorations on so many buildings, this simple fact, which I have no doubt is a fact, ought to be generally known." As the "whitening" is evidently due to different causes in different kinds of brick, experience will have to teach the cause and the remedy in each case.

Architect Beman is proceeding with the plans for the new eleven-story office-building at the southwest corner of La Salle and Adams streets, for Marshall Field, and the building will be erected without delay.

Architects Silsbee & Kent: For Potter Palmer, four-story and basement brick and stone structure, 40 by 70 feet, to cost $20,000; plans finished.

Architect Otto H. Matz: For Bartholomae & Leicht, six three-story stone-front flats, seven rooms on each flat, with paved cellars, laundries, etc.; also brick barn, flats 60 by 80 feet, to cost $24,000, to be completed June 1. For Dr. W. W. Allport, a three-story brick building of pressed brick, stores below and upper part flats, 44 by 108 feet, to cost $16,000. This building stands opposite to main entrance of Humboldt Park, and will also contain a public hall. To be completed June 1.

The new Hospital for Women and Children, corner Paulina and Adams streets, will soon be commenced. The Board has adopted the plans prepared by architect Matz. It will be an imposing structure, five stories high above and ten feet cellars, with a south front of 150 feet. The material will be of red pressed brick, brownstone and terra cotta. The main features of the front are a central pavilion, planked at each end of building, octagonal towers run up above projecting bays. The whole building is to be surmounted by a high mansard, covered with the best red slate, pierced by massive dormers. The cost of the Hospital, including a projecting wing, connected with the main building by an iron and glass corridor, will be about $80,000.

Also for P. Schoenhofen, a three-story brick dwelling, icehouse, stable, etc., just contracted for, to cost $8,000. For Harry F. Brand, two-story and basement, brick dwelling-house, 24 by 60 feet, to cost $6,000.

The Peter Schoenhofen Brewing Co. will erect, during the season, a modern barn and stabling for 100 horses. The second floor, on which the stalls are placed, will be supported by four columns and steel beams. The building will measure 100 feet each way, and will cost $30,000. Ample provision is made for storage of hay, oats, feed, etc., carried up by an elevator. The work will be started as soon as new bricks come into market.

Also for Consul H. Claussenius, a three-story and basement brick residence, the front to be of Milwaukee brick with basement of Bedford stone and Berlin stone trimmings above. The entrance will be through a stone toggia, ornamented with granite columns and carved capitals. The interior finish will be in cherry, white and red oak and pine. Work will be commenced at once, as the contracts have all been let. The cost will be about $15,000.

Architect Fred W. Wolf: For L. Wolff Manufacturing Co., basement and four-story factory, of brick with limestone trimmings, 75 by 142 feet, to cost $30,000; contracts all let and work will commence in a week or so. For Ernst Bros., new brewery, brewhouse 32 by 32 feet, icehouse 52 by 52 feet, engine and boiler house 30 by 35 feet, to cost $18,000; under way and ready for roof. For F. Madlener, eight flats in four houses, 60 by 96 feet, to cost $20,000; nearly finished. For Jo Junk, new brewery, 34 by 80 feet, to cost $12,000; Ph. Kroeck, store and dwelling, 25 by 42 feet, to cost $3,500; foundation in. For J. Leisy, Cleveland, O., wash and storehouse, 45 by 60 feet, and boiler house 36 by 50 feet; just commenced. For C. F. Schmidt, Indianapolis, brewhouse, engine and boiler house; plans completed and taking figures. For Foss & Schneider, icehouse, brewhouse, and barn; under way. For Muskegon Brewing Co., brewhouse 36 by 36 feet to cost $9,000; under way. For the Joe Schlitz Brewing Co., machinery and icehouse; projected. For Bernhard, of Canal Dover, O., a new brewery; working plans about done.

Architect J. J. Egan has prepared plans for a residence for Charles Trego, which will be erected on Lake avenue, near Thirty-ninth street. It will be modern Gothic in style, irregular, 46 by 70 feet, to be built of pressed brick and brownstone, and three stories above the basement. The cost will be about $40,000. Also plans for a new parsonage for the new St. John's church, at the corner of Clark and Eighteenth streets, to cost $18,000. Also, the contract has been let for a modern flat building for Frank McAuley, on Huron, near State street. It will be three stories high above the basement, 25 by 70 feet, with a limestone front; cost $11,000. Also plans for two houses for John O'Connell, to be erected on La Salle avenue, near Schiller street, 25 by 50 feet, and to cost $8,000 each. Also plans for a three-story building for stores and flats, 40 by 80 feet, at the corner of State and Michigan streets; the front to be of pressed brick with stone dressing. Also, for a Catholic school building for Rev. D. H. Reardon, at the corner of State and Forty-first streets, to cost $16,000; a small convent at Brighton Park, adjoining the new church of St. Agnes, for Rev. M. Hogan, to cost $8,000, and a Catholic church at Clinton, Iowa, 65 by 130 feet, 46 feet in clear interior height, with nine hundred sittings in the audience-room. It is a modern Gothic structure of pressed brick and Iowa stone, and will cost $40,000.

Architects Wheelock & Clay have let the contracts for three brick stores for D. L. Streeter, on Van Buren street, near Western avenue, 60 feet front by 50 feet deep, with flats above; cost, $7,500. A dwelling for Dr. James Tucker, on Thirty-fifth street, near Cottage Grove avenue. The house will be 25 by 43 feet, two stories and basement, built of pressed brick with brownstone trimmings, and will cost $5,000. A house for J. Rathbun, on Prairie avenue, near Twenty-eighth street, 40 by 68 feet, with two stories, and cellar and attic. It will be constructed of brownstone and pressed brick to the first story, slated with red slate on the second story, with a slate roof; cost $20,000.

Architect W. L. Carroll has the plans for improvements of the Revere House. Two stories will be added, and a mansard roof with a tower and pediment features, and many improvements will be made in the interior of the building. The cost of the improvements will be $30,000.

Architect Edward Bauman has let the contract for the erection of a three-story block of flats, 25 by 70, on Wrightwood avenue, for Dr. Williams. It will have a pressed brick front, and cost $9,000.

Cleveland, O.—Prospects and present work fair; most active in frame and brick dwellings ranging from $10,000 down. Architect George H. Smith is building, for Savings and Trust Company, a basement and five stories fireproof building, front polished granite, basement terra cotta and pressed brick above, 45 feet 3 inches by 150, height 104 feet from sidewalk, to cost $120,000; commenced; divided contracts.

Coldwater, Mich.—Weather backward and the season not fairly opened. Architect M. H. Parker: For Ralph Clarke, a two-story and basement dwelling-house, steep roof, pointed style, built of wood above basement, basement of stone, 32 by 76 feet, to cost $5,000; just commenced. For Lincoln Briggs, Quincy, Mich., a two-story frame dwelling, hip roof, shingled, 34 by 64 feet, to cost $3,800. For David Fuller, two-story frame dwelling, 28 by 52 feet, to cost $2,000.

Detroit, Mich.—Building prospects good, and a large amount of work will be done during the season.

Architects Wm. Scott & Co.: Plans completed for residence for Chas. H. Smith, and barn. Both will be free Rennaissance in style, and, judging from the elevation drawings, the former will rank among the foremost of the stately residences of Detroit. Many of the forms resorted to by the architects will probably receive numerous criticisms until the public become familiar with them. They are certainly novel. Materials compressed brick, heavily trimmed with variegated and pure brown Lake Superior stone, cut and molded into forms peculiarly designed to obtain the desired effect without the intervention of the stonecutter's chisel. No distinctive line is shown isolating the sub and superstructure, as generally seen in architecture. The rock-faced variegated stone forming the substructure will be carried up to the height of the sills and lintels of the first story at different points. The natural massiveness of this work will be toned down and graced by friezes and panels of finely wrought decorated red terra cotta, and the chimneys will be caught up and also gracefully wrought up above the roof in terra-cotta treatment. Total expense of house and barn $50,000. Also, same architects are just completing the designs for the six-story block of William B. Wesson and Geo. B. Hill. It will be 50 by 100 feet in size, and will form one large store, rich iron columns and ceiling-work being the only obstructions to a clear space from basement to attic, and from wall to wall. With barn added, total cost will be $50,000. Also letting the contracts for an eight-room two-story Colonial cottage for James A. Randall. It is to cost $7,000.

Architect A. C. Varney: Prospects for building very fair at the present time. For Wm. A. Butler and Wm. Chope, four-story brick and stone, for stores, to cost $1,200. For M. W. O'Brian, two two-story brick dwellings, to cost $5,000. For R. Wiley, two-story brick dwelling, to cost $5,000. For Mrs. Dudley, alteration of her brick residence, $5,000. For Mrs. Jane Baer, two-story brick dwelling, to cost $3,500; under way. For Thomas Smith, two-story frame dwelling, to cost $3,500. For Mr. Farnum, brick stable, $1,000. For H. Vernor, two-story frame, to cost $4,000.

Detroit plasterers, and there are between eighty and one hundred of them, want an increase of wages, and a few days ago struck for $3.50 per day, the rate paid last summer. The strike is considered premature by some, but Austin & Brennan, employing between twenty and thirty men, will grant the advance, and Hanely & Bro., employing eighteen, will pay the sum asked to certain ones, but not to all. The employers are willing to grant the increase to the best men, but claim that the services of many of the plasterers are not worth $3.50 per day.

Dubuque, Ia.—Prospects fair, and considerable building will be done. Architect F. D. Hyde: For A. Christman, also for J. P. Scott, additions and alterations of residences. The former to cost $4,500 and the latter $2,500. For James Howie, two-story brick residence; cost not estimated. For J. H. Steiner, pressed brick front and extension to store, to cost $5,000. For Jas. Sally, two-story brick residence, to cost $2,000. For Hyde Clark, changing roller-skating rink into a natatorium, to cost $3,000.

Fort Wayne, Ind.—The prospects for building are very encouraging, but as the season has not fully opened yet, it is a little premature to say the amount of building that will be done. It will, however, equal that of last year, if not exceed it. As there was a good fall last year for building, a great deal of work was left over, which is all under way now and rapidly approaching completion.

Architects J. F. Wing & Co., Masonic Temple and Opera House, four stories, cut stone, pressed brick and slate roof, 70 by 120 feet. Relet contract, after standing four years up to the second story, to complete the opera house and enclose the building, for $26,000; to be completed by the middle of October; work now under way; general contractor Christian Boseker, and W. & J. Geake stonework. Gate lodge for Lindenwood Cemetery, one-story, Michigan sandstone above the water-table, rock-face, slate roof, style Gothic, 35 by 35 feet, to cost $6,000; projected. Ready for bidders now: For Julius Dick, Huntington, Ind., two-story frame residence with basement and attic, slate roof, style Queen Anne, 40 by 50 feet, to cost $6,000; projected. For C. L. Cintliver, three-story brewery, brick and stone, tin roof, 36 by 82 feet, to cost $5,000; projected. For English Lutheran church, addition of lecture-room, two stories, brick and stone, slate roof, steam heating, 32 by 74 feet, to cost $5,000; projected. For John M. Coombs, two-story frame Queen Anne cottage on farm near city, 25 by 30 feet, to cost $2,500; under way. For C. A. O. McClellan (Auburn, Ind.), brick and stone residence, addition to a bank building, 25 by 58 feet, to cost $4,000; projected. For Hon. R. C. Bell, pressed brick and cut stone residence, slate roof, 40 by 50 feet, to cost $7,000; projected. For M. E. College. This building is to be extensively improved so as to make it first class in every respect; projected.

Grand Rapids, Mich.—From the various and best sources of information, as well as from indications plainly visible to all, in a few weeks the spring campaign of building will be fully inaugurated and will be a full continuation of last year's boom. These prospects are not premised upon mere guesswork, but are the results of careful inquiry among architects and builders, who unanimously pronounce the indications fully up to last year's outlook, with the building of more blocks a leading feature.

Architect S. J. Osgood: For E. F. Uhl, pressed brick dwelling, stone trimmings, to cost $25,000; will be finished May; built by the day. For Mrs. Widdicomb, same as above, to cost $21,000, with addition of a barn to cost $3,000. For Geo. White, dwelling, brick, with stone trimmings, to cost $14,000; well up and roof on. For Mr. S. A. Hart, brick veneered dwelling, to cost $6,200; contract let, March 1, to F. C. Miller, contractor. For Henry Walsh, frame dwelling, to cost $5,800; contract let last fall. Union Benevolent Association Building, brick, stone and iron trimmings, slate roof, to cost $24,000; to be used as a hospital. State Industrial School for Girls at Adrian; was let last season and will be finished by June 1. This is the fifth college on the grounds costing $24,000; James Donough, contractor. It will be of brick, stone trimmings, slate roof and iron cornice. For H. E. Noble, Lincoln, Neb., frame dwelling, to cost $3,500. For A. E. Rides, Hastings, Mich., frame dwelling, to cost $2,000. Baptist Church, Adrian, to cost $10,000; contract not let. Block of three stores, three stories high, 85 by 85 feet, for Mr. Norris, to cost $15,000, at Grand Rapids. Also block of two stores, three stories high, 50 by 70 feet, for Bemis Estate, to cost $10,000. None of the contracts yet let in the last three buildings. For Mrs. Buckley, dwelling-house, to cost $2,500. Congregational Church at Cadillac, Mich., to cost $9,000. Holland Reform Church at Coopersville, Mich., to cost $3,000. Dwelling-house for F. C. Miller, to cost $2,500. Schoolhouse at Olivet, Mich., to cost $4,000; contract not let. Catholic Church at Alpine, Mich., to cost $10,000; brick, with stone trimmings; to be finished this season. With the mild weather the work of supplying material and excavating for basements will be begun in earnest, and before the end of the season Grand Rapids will have made another immense stride toward perfecting its outlines as one of the best built cities in the Northwest.

Green Bay, Wis.—State of building operations at this time is very backward, and the outlook for the season is not altogether favorable.

Architect J. McDonnell: Schoolhouse of six rooms, three on each floor; two stories and basement, latter stone; walls brick, roof iron, cornices, etc., galvanized iron, 50 by 60 feet, to cost $8,500; plans completed. R. C. Congregation Church at Manistique, Mich., frame, stone basement, style Gothic, open timber roof, tower and spire 125 feet high; building 36 by 85 feet deep, to cost $4,200; in course of erection.

Goshen, Ind.—The building interest is beginning to open out on a small scale, as reported by J. N. Jones, contractor and builder.

Nash, Knox & Hubble are putting in the foundation for a furniture shop, 56 by 146 feet, two stories, with a 56 by 50 feet one-story extension on north end for engine and drying rooms. The building will be of brick. Samuel Minnis is the contractor of the stonework. The bricklaying and carpenterwork not contracted. They will also put up a wareroom, 50 by 100, two stories high, the foundation walls of stone. The building will be a frame, lined with matched sheathing and encased with iron-clad siding. The roofing of both shop and wareroom will be tarred felt paper laid on in G. B. Cline's roof paint and fine sand. Two business rooms on Main street, for John Wurster and Mrs. Bartlemay, each 22 by 80 feet, two stories; Amos Schrock, contractor.

Indianapolis, Ind.—A fair amount of building is under way and in embryo; most all work contracted is taken at close figures. The action of the Insane Asylum commissioners in requiring bond double the amount of each bid to accompany the same, has kept a number from competing. No contracts are yet made.

Architect C. A. Wallingford: For Berkshire Life Insurance Company, stores, three stories, pressed brick, terra cotta and Lake Superior sandstone, 34 by 60 feet, to cost

$10,000; projected; and a residence for same company, frame, two-story, cost $4,000; Jungclaus & Schumacher, contractors. For Electric Soap Manufacturing Company, brick and stone, three stories, 40 by 1,000 feet; to cost $20,000; projected. All of this city. In Wabash, Ind., for Rev. C. A. Wesner, frame, to cost $6,000; projected.

Jacksonville, Ill.—Architect Isaac C. Coleman reports: The outlook here is bad. The most that will be done here this season will be alterations and changes. State of Illinois Insane Hospital, 459 feet front, to cost $135,000; Presbyterian Church, at Manchester, Ill., 26 by 48, to cost $2,200; projected.

Jamestown, Dak.—Jamestown starts the year's proposed improvements with a $40,000 hotel, an insane asylum, a college, to be built under auspices of the Presbyterian synod; a new brick schoolhouse, to cost $14,000; an entire block of brick buildings, to cost $100,000; and waterworks, costing $40,000, for which the engineers are now making diagrams, taking elevations, etc.

Kansas City, Mo.—Prospects good and improving.

Architect F. B. Hamilton: For E. W. Smith, two-story and attic dwelling, of brick with shingle roof, to cost nearly $7,000; nearly finished. For R. M. Snyder, two-story and attic dwelling of brick, with slate roof, to cost $7,500. For E. A. Walrusley, a two-story frame dwelling, shingle roof, to cost $2,500. For Judge F. M. Black, a two-story and attic dwelling, brick, with slate roof, to cost $10,000; foundation commenced. For Corle Cracker Co., four-story warehouse, brick, gravel roof, 20 by 142 feet, to cost $7,000; projected. For F. W. Poor, four-story addition to Lindell Hotel, 40 by 100 feet, to cost $20,000. For Chas. Campbell, four-story brick warehouse, 48 by 100 feet, to cost $16,000; projected. For E. D. Fisher, four-story brick warehouse, 48 by 100 feet, to cost $14,000.

Madison, Wis.—Proposals for building the new Dane County Courthouse were opened on the 27th ult., without result reached as yet. It is evident that any proposition to use red brick and terra cotta in the construction of the building will be voted down by the board. Several of the city members are decidedly opposed to brick and terra cotta, and it seemed that at least two-thirds of the members from the various towns were of the same opinion. They say give us solid walls of stone—no "gingerbread work." Granite and well selected stone appear to be the materials desired by the majority of the board in the construction of the exterior walls.

Milwaukee, Wis.—The building outlook seems to be very promising. We have orders for dwellings and store and some buildings in different parts of this state which will aggregate over $200,000, to be built this season.

Architects H. C. Koch & Co., Dane county, Wis., two stories and basement, stores, basement brick and terra cotta, fire-proof, 113 by 77 feet, to cost $150,000; will be let the latter part of this month. In this city, Franklin District School building, stone basement, brick superstructure; three stories, fourteen classrooms and an exhibition hall, 120 by 70 feet, to cost $51,000; contracted. Also Central Police Station, stone foundation and brick, about thirty-four cells, iron floors, 53 by 120 feet, to cost $34,000; to be let on the 25th of April. Mahaska County Courthouse (Oskaloosa City), two stories and basement, brick superstructure, stone trimmings, fire-proof, 75 by 106 feet, to cost $85,000; being done by county by the day, by reason of failure of the contractors. R. C. Convent, at Belleville, Ill., two stories and basement brick building, 128 by 88 feet, to cost $42,000; contract to be let this month. Little Sisters of the Poor, this city, chapel and west wing, stone and brick, three stories, 110 by 92 feet, to cost $51,000. Addition to Sheboygan County Insane Asylum, two stories and basement, brick superstructure, to cost $9,000; under contract. For H. H. Hackendall, this city, three-story, stone basement, brick superstructure, 24 by 70 feet, to cost $9,000; not let. For Upmeyer estate, three-story and basement, brick, stone foundation, 22 by 68 feet, to cost $7,000; not let. Public School, Watertown, Wis., two stories and basement, brick building, 80 by 85 feet, to cost $18,000; contracted for. We have on hand eleven dwellings in this city to cost from $3,000 to $10,000 each; and several brick store buildings, aggregating about $42,000; also two factory buildings, one costing about $25,000, the other about $12,000.

Architect Andrew Elleson. For J. C. Diederich, three-story brick building, 25 by 120 feet, to cost $6,000. For M. C. Cape, one-and-a-half-story frame dwelling, 22 by 44 feet, to cost $1,250. For M. C. Krause, two one-and-a-half story frame dwellings, 21 by 46 feet, to cost $2,200. For Capt. Von Sehlen, one-and-a-half-story frame, stone foundation, 26 by 42 feet, to cost $2,650. For Mrs. C. Harmeyer, two-story frame, stone foundation, 22 by 50 feet, to cost $3,700. For A. Gruettner, two-story brick-veneered dwelling, 31 by 50 feet, to cost $3,000. For C. M. Lantiy, two-story frame, stone foundation, 25 by 47 feet, to cost $3,000. All the above buildings are under way. For C. Rostad, two-story brick-veneered store, 25 by 50 feet, to cost $3,000. For C. Peterson, two-story frame, stone foundation, 27 by 53 feet, to cost $3,000. For H. Lindsay, two-story, brick veneered, stone foundation, 28 by 50 feet, to cost $4,000. For J. Kopmeyer, one-and-a-half-story frame, stone foundation, 20 by 50 feet, to cost $1,600. The last four projected.

Public Buildings.—The house committee on public buildings and grounds agreed to recommend the erection of public buildings at Clarksburg, W. Va., to cost $50,000; St. Joseph, Mo., $75,000; San Antonio, Tex., $100,000. Additional appropriations of $75,000 for the public building at Ft. Wayne, Ind., and $300,000 for the public building at Detroit, were also recommended.

Sioux City, Iowa.—The outlook is very good. In other offices here there are plans for considerable good building, a large wholesale house being one. A building for the postoffice is projected, but no proposals accepted.

Architect E. W. Loft: For Hon. Geo. D. Perkins, two-story and basement residence at Sioux Falls, stone, brick and terra cotta, 40 by 60 feet, to cost $12,000; basement in. For W. E. & H. A. Johns, two houses, frame, with brick basement, 30 by 50 feet each, to cost $3,200 each; under way. For D. T. Hedges, two stores, two stories and basement, brick and terra cotta, 50 by 50 feet, to cost $6,000; under way. For Melvin Grigsley, Sioux Falls, two-story and basement residence, brick and terra cotta, 38 by 44 feet, to cost $7,000; projected. Union Stock Yards, office and barns, to cost $15,000; under way. National Homestead Monument for D. T. Mitchell, Sioux Falls, stone, marble and copper, 40 by 40 feet, and 180 feet high, to cost $100,000; projected. For S. P. Mikesell, Ponca, Neb., frame residence, two stories and basement, 30 by 55 feet, $3,800; under way.

St. Louis, Mo.—The work of reconstruction of those buildings wholly or partially burned the night of the last week in December in the city has progressed very much. The buildings at the corner of Fourth and Elm, belonging to Mr. Chas. Hoyle, will be replaced as soon as settlements can be made with the insurance companies. There is some difficulty involving $2,000 or $3,000 which will be settled shortly. The companies have proposed to replace the building. J. M. Hutton, who owns the adjoining property, will rebuild and spend $15,000 in that work. The Niedringhaus building will be commenced shortly. The cost of the structure will be about $30,000. Little has been done toward clearing up at the site of the old St. Nicholas Hotel. The ground belongs to Mrs. Wilson and the Connecticut Mutual Life Insurance Company. One of the proprictors wishes to buy of the other, and reconstruction depends upon the consummation of the sale. If it is made satisfactorily, there will be a block of stores erected at a cost of about $50,000. The Burrell-Comstock building, which has been described, will shortly begin to assume shape. The foundations are being laid. Maguire & Hartnett are preparing to rebuild the houses at Sixth and Walnut, destroyed the night of the Burrell-Comstock fire. They will spend a little over $7,000. In addition to these a new hotel is being erected for Beers at Grand avenue and Olive street, to cost $65,000. It will be five stories high, have a frontage of 60 feet and will be 150 feet deep. There are many blocks of houses being erected by speculators for renting.

Architect A. Druiding: Holy Trinity School, 40 by 50 feet, to cost $10,000. Two stone front houses, to cost $10,000; projected. St. Joseph's Church, Louisville, Ky., 64 by 150 feet, to cost $45,000; commenced. St. Joseph's Church, Fort Jennings, O., 50 by 129 feet, to cost $21,000; commenced. Convent of Sisters of the Poor, Fort Wayne, 45 by 150 feet, to cost $40,000; commenced. Convent of Dominican Sisters, Racine, Wis., 100 by 39 feet, to cost $10,000; commenced. School of Convent of Dominican Sisters, Racine, Wis., 45 by 120 feet, to cost $12,000; projected. St. Stephen's Church, New Cocln, Milwaukee County, Wis., 45 by 110 feet, to cost $11,000; commenced. St. Francis' School, Tonawanda, N. Y., 45 by 110 feet, to cost $10,000; commenced. St. Bridget's Church, Cuba, Allegheny County, N. Y., 50 by 100 feet, to cost $12,000. For all the above Mr. Druiding is the architect.

Architect Chas. K. Ramsey: Building is starting all over the city; number of permits issued for the last six months, 854 brick and 242 frame buildings, the estimated cost of which is $3,555,123. For Wm. O. Gibson & Son, three-story brick building, store in first story and flats in second and third stories, composition roof, openings in front and trimmed with cut stone, 25 by 75 feet, to cost $9,000.

St. Paul, Minn.— Prospects are exceedingly good.

Architects Carpenter & Teltz inform us that the building season has fairly commenced and this season is marked as the beginning of a new era in building in that city. The single fronts dotting the principal streets which marked the prosperity of the city are being overshadowed by the long fronts of commercial blocks and buildings of magnitude occupying almost whole squares, and all of costly material designed by the most expert of her architects. Work is now beginning on the Mammoth Hotel, occupying a square facing Robert, Sixth and Seventh streets; directly opposite corner of Robert and Sixth streets the Chamber of Commerce building, six stories and basement; on another corner plans are preparing for another mammoth block. On the corner of the next street the Minnesota bank will put up a building quite excelling any bank here. The German-American bank, at present the largest structure of its kind, has resumed operations. The First National bank, the next in size, is finishing rapidly. The A. H. Wilder block, occupying a square from Jackson to Sibley streets, on Fourth, is to commence at once, contracts having been awarded. The St. Paul Improvement Co. have their building lot ready to commence, the contractors being engaged in estimating the cost. Besides these the Drake block is rebuilding rapidly, and many more buildings of minor importance have already commenced, and considering the number of plans extant for figures, the city is likely to have the most extensive building season ever realized in the city. Dwelling-houses are in active demand and very hard to get, and while the commercial interests are spreading so, the large number of dwellings now building will not begin to keep pace with the future requirements. The new Capital bank, the designs of which have been completed by Carpenter & Teltz, have been adopted by the directors. The illustrations will follow in a future edition. This building will be perfectly fire-proof, everything excepting the doors and furniture to be of iron, stone and tiling; the stipulations of the owners being that it shall be a fireproof vault and the handsomest design yet made in St. Paul, the architects having *carte blanche* to make it so. It is to be located on Jackson street, between the Merchants Hotel and Gilfillan block, and it will tower up above the highest building in the city a full story.

Topeka, Kan.—Outlook for building is good. Architect H M. Hadley: Schoolhouse at Concordia, Kan., two stories and basement, built of stone and brick, shingle roof, 98 by 87 feet, to cost $15,000; plans completed. For Wm. McBrown, residence at Fall River, frame, 35 by 62 feet, to cost $3,500; plans not done. For S. Barnum, addition to residence, frame, 16 by 30 feet, to cost $1,000; under way. For Capt. A. Hutchinson, frame addition to residence, 20 by 36 feet, to cost $1,000. For Theo. S. Mason, frame residence, 25 by 50 feet, to cost $2,000. All the three last at Topeka.

Winona, Minn.—Building outlook is very fair, and a good deal will be done as soon as good weather sets in.

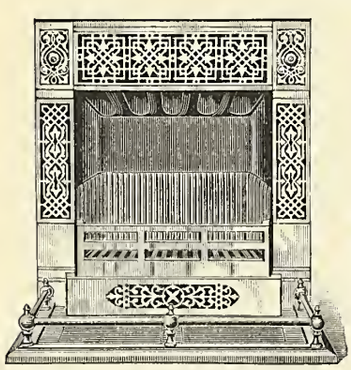
Architects C. G. Maybury & Son: For Odd-Fellows, three stories, stone building, brick, stone and terra cotta, 40 by 80 feet, to cost $12,500; under way. For E. A. Gerdtzen, two-story ditto, 30 by 80 feet, to cost $6,500; under way. Bohn Manufacturing Co., two-story brick office, 25 by 56 feet, to cost $4,000; projected. For J. W. Lance, two-story brick residence, 30 by 50 feet, to cost $2,500; under way. For W. W. Slocum, two frame residences, 24 by 40 feet, to cost $1,500. Schoolhouse, La Crosse, Wis., two-story brick, to cost $7,000. Store building at Albert Lea, Minn., two-story brick, to cost $12,000. Bank building at Tracy, Minn., two-story brick, to cost $4,000. Store building at Galesville, Wis., two-story brick, to cost $6,000. Schoolhouse, Walnut Grove, Minn., two-story frame, to cost $2,000. Residence at Eyota, Minn., two-story brick, to cost $3,000; ditto at Huron, Dak., for F. E. Stearns, to cost $2,500; ditto at Sibley, Ia., for F. F. Grant, to cost $1,500.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating

GRATE.



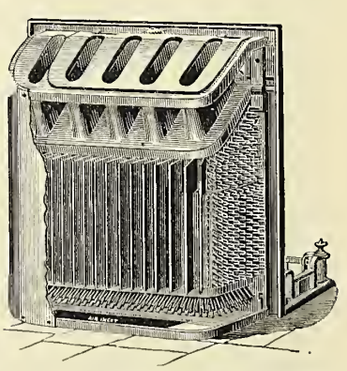
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, MINN., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

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THE

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Draughtsmen, Attention!

THERE seems to be quite a demand at present for good architecturald raughtsmen, and we have frequent calls from architects who are looking for such help. If draughtsmen needing work will send us their address, we shall probably be able to place them in communication with architects who will employ them. Address THE INLAND PUBLISHING Co., 17 Tribune building, Chicago, Ill.

THE question of convict labor will not down. It has become one of the troublesome, if not one of the most perplexing, questions of the day, and confronts the legitimate manufacturer and the honest laborer at almost every turn. Whether the circumstance is an unusual one or not, the men who prate the loudest against convict labor are not at all times sincere in their convictions. For instance, all the material of one of the most costly and elegant marble palaces reared in Chicago, although still in an unfinished state, has been prepared by convict labor. The contract for the building was let by the day; the marble, in the rough, was brought from Vermont to Joliet, and there cut into form by prison labor. The marble finishings alone in the interior of the truly palatial residence cost $250,000. The whole structure when completed will have cost well nigh to $1,000,000. And yet its proprietor has always been openly opposed to convict labor when coming into competition with the work of the legitimate contractor. To have pursued any other course would have been a great detriment to his business interest. With him, however, theory is one thing and practice another. The question of convict labor has been discussed almost to exhaustion, and it would seem very little that is new could be said for or against it. The recent publication of bids for convict labor in Illinois has, however, as is usually the case, stirred up the small manufacturers, who are unable to give the bond required, or, in times of business depression, to keep the convicts employed and carry the accumulated product.

IN some lines of business the injury inflicted on small manufacturers by convict labor is so great that many of them are driven out of the trade. As an illustration of the case, a manufacturer of Chicago puts it in this way:

"I pay my girls twenty-five cents per dozen pairs for cotton socks, and they can make about four dozen pairs per day, or perhaps their wages may not average over five dollars per week. At the figures bid by some of my competitors for convict labor the cost of manufacture will not exceed eleven cents per dozen, and that, too, without any expense for rent, fuel, watchmen, etc., everything except machinery and stock being furnished by the State. Is it surprising, then, that manufacturers employing convict labor can undersell me 20 to 30 per cent? It is just the same with many other industries. Penitentiary-made boots and shoes, saddles, chairs, and what not, compete on all hands with the same goods made by free labor, to the serious loss of the manufacturers."

When asked the question what remedy he had to propose to a system which works so great an injustice to many well-meaning and honest manufacturers, he could only say that the whole matter rested with the legislature. He made the suggestion, however, to have a law passed that no convict-labor contracts should be let at a figure under 20 or 25 per cent less than the prevailing rate for free labor of the same class. Even then employers of convicts would have a great advantage, not only of the difference in the price of labor, but also in the matter of rents, etc.; but employers of free labor would not be driven out of the market. Very few persons who have not examined into the matter can form any idea of the immense profits derived from convict labor under the existing system. The wages of the convict should be made to benefit himself as well as the State and his employer. To this end two plans might be pursued: one would be, to pay half his earnings into the public treasury, and, if he had a family, pay the other half to his wife and children. If he is not married, let half his earnings be held until his term expires and then paid over, thus enabling him to start out fairly on the path of virtue if he is so inclined. The other plan is, to divide the convict's wages into three parts — one for the state, one for his family, and the other third to be kept for himself. If convicts can not be debarred from competing with honest mechanics in the line of any of the trades, then the basis of competition could at least be in some degree equalized.

ANY city ordinance which imposes a burden upon any one class of citizens to the exclusion of others, who ought, in all justice, to be held equally liable, cannot prove otherwise than a peculiar hardship upon those affected by it. When a new building is to be erected, the masons are always the first on the ground. In Chicago, the ordinance, as it stands, requires the mason contractor to see that the permit for the building has been properly issued, and he must also go to the water office and arrange for the use of water for the building in process of construction, and make a deposit and give bond to indemnify the city against any and all loss that may be sustained by reason of the placing in the streets of any material for the construction of the building, or making any excavations in and about the work to be done pending the completion of the structure, and to leave the street in as good condition as it was when used for the deposit of material. After this bond is given the mason proceeds with his work, and in many instances has the débris occasioned by his work all removed, pending the coming in of the contractors, or while the work of the plasterer, the carpenter, the plumber, the furnace-builder, or the slate-roofer, is going on; yet he must leave his deposit with the city; his bond must continue to be in force, and the liability of himself and his surety attached, in case an accident should occur long after he has completed his contract, removed his appliances, and what material or waste might have been left, and in many instances after the owner has accepted his work and settled with him.

THE injustice of this building law lies in the fact that no matter how many other contractors there may be engaged on the same building, the mason is the sole party upon whom the responsibility rests for maintaining danger signals at night, and upon him also rests the responsibility for any damages that may occur by reason of any act or omission on the part of any other contractor, or contractors, engaged upon the same building. At a recent meeting of the Master Masons' and Builders' Association this question of requiring the contractor of the mason work to give bonds to indemnify the city against damage for accidents from obstructions, etc., was brought up for consideration, and a plan was suggested which proposes to place the several contractors on an equal footing as to liability, and remove the burden from one class alone. It is also proposed to suggest to the council that the ordinance be so amended that the building department shall be authorized to grant to the owner, with his permit to build, the right to use water and have him execute his indemnity bond at the same time, or in the same office, so that all business with the city pertaining to the erection of a building may be transacted in one office, and not in several different departments, as it now is. This, it appears to us, is the better plan, and when this matter is thoroughly understood, owners of property who contemplate building will not interpose a single objection to a law which very properly divides the responsibility equally with all contractors, from those who lay the foundation-stone of the building to those who put on the roof. Numerous cases of unreasonable hardship are not wanting to show that the ordinance as it stands is very far from being even-handed, and its amendment in the form suggested ought to receive proper consideration.

THE Anti-Metric Society has, for want of something better to engage its time, been discussing the question (as though it had any bearing upon the ultimate destiny of architects) whether or not Joseph was an architect. Mr. Lewis Biden, Portsea, England, writes: "Approaching the Great Pyramid of Egypt from any direction, it presents the form of the Greek letter Delta, and its shape was probably the origin whence tracts of country between the divergent mouths of rivers became so named generally. The entrance approximately exhibits the Alpha, while the boss on the granite leaf shows the Omega." A letter from J. K. Hornish, of Denver, Colo., inquires if the entrance passage of the pyramid looks out on the present north star. Rev. H. Z. Wood answered that the north star is too high by 2° 39′, 45″ to be seen from the depths of the entrance passage of the pyramid. A letter from Rev. E. P. Ingersoll, of Rosevale, France, sharply criticised Dr. Redfield's supposition that the architect of the great pyramid was Joseph. The doctor defended his position. A discussion ensued, participated in chiefly by Dr. Redfield, Messrs. Lattimer, Gage and Bond. There was also some discussion on Freemasonry. The meeting where these proceedings took place was Cleveland, Ohio, where a number of the best architects in the country reside. We are glad to know that each and all of them were too busy with their plans and contracts to participate in a discussion of little benefit to either their profession or to the world at large.

THE strike of the journeymen carpenters was foolish mainly because the majority of strikes are foolish; but it is a fact that carpenters receive the lowest remuneration for their work of any of the building trades, considering the skill required and the quantity of tools necessary. But the rate of wages for good carpenters is kept down by those who have not thoroughly learned their trade and call themselves carpenters. There is also a check from another source, and that is foreign emigration. One contracting firm in Chicago keeps a man at the depots for the purpose of picking up Scandinavian workmen as they arrive, and as they know nothing of the rate of wages paid they are hired at a low price, and with a little education can successfully compete with the less skillful grade of American workmen. This condition of things makes a union, as unions now are conducted, unjust; and while good workmen can command good wages independent of a union's demand, it prevents the man of less skill from working, or else compels the contractor to pay more than is right to an inferior workman. When unions will organize on a sensible and intelligent basis, make their organization a graded school, where each member has a standing according to his capability, and the rate of wages paid governed by that, and when they become so stable and reliable that a union card will take the place of the apprenticeship papers of the old world, then, and not till then, will unions be successful, or anything but a continual injury to both the manufacturing or constructing interests and the members themselves.

AS Chicago is situated, with a broad expanse of prairie on one side and the blue waters of Lake Michigan on the other, all the conditions, taking the climate into full consideration, are as favorable, and even more so, for an atmosphere during the greater part of the year as clear as that which prevails in Colorado. No good citizen will undertake to say that such a consummation every day in the week is not to be devoutly wished, nor will anyone deny that such a result can be obtained in only one way, and that is by a rigid enforcement of the smoke ordinance. The smoke nuisance is a public and not merely a local question. Every resident of this city ought to feel an interest in its abatement, and especially those who are largely interested in building enterprises and those who are owners of costly business structures, as well as private residences. We will venture the assertion that not one person in a hundred, who did not know the fact, would ever suspect that the stately building on the northeast corner of State and Washington streets is composed of Vermont mar-

ble, for certainly its smoke-begrimed walls give it the appearance of the commonest stone. Whatever architectural beauty many of our stately public and private buildings may possess is almost hopelessly marred by the dense amount of sooty carbon which falls like a pall over the city, besmearing and almost ineffaceably injuring everything with which it comes in contact. It is not desirable that the law should throw any impediment in the way of our commercial or manufacturing progress, as any legal interference with the industrial interests of the community is to be deprecated and avoided. Yet, since it has proved that a more efficient process of combustion can be secured, even in the case of bituminous coal, so as to obviate the nuisance of smoke, and, at the same time, to be a positive advantage to the consumer, there is no hardship in compelling the adoption of the requisite means for that purpose, when it will confer so great a boon on the rest of the community. It can no longer be said that the difficulties arise from our ignorance of the constitution of fuel, or of the laws of combustion, but from practical obstacles, such as necessarily arise from the variable production of gaseous and other volatile products, and the want of a system and regularity which attends the management of a furnace. Habits of economy and attention to a few simple rules, have not been sufficiently enforced, and it is obvious that much may yet be done in establishing and carrying out a well organized plan of operations. If the management of furnaces in our large printing establishments, our public school buildings, hotels, and a hundred other places where manufacturing proper is not carried on, were consigned to men properly trained for their respective duties,—not to speak of the many excellent smoke-preventing devices which are in the market,—many of these difficulties would vanish, and the atmosphere of our city would become more pure; the architectural beauty of our public and private buildings would be preserved; the general health of the city would be improved; personal discomfort would be lessened, and, from an economical point of view, the saving of fuel would be large.

THAT Western architecture has advanced to a stage where it can be favorably compared with that of Eastern cities, and even Europe, is evidenced by the reproduction of Pullman's office building in the *Building News*, of London, from our illustration in the edition of February. This piece of enterprise on the part of the great building journal of England is to be commended, as also their accurately copying of the descriptive article attending it. In recognizing in this building the genius of its architect, who has given to Chicago so magnificent a structure, the journal is to be commended. It is fortunate for the architectural profession that the possibilities of lithography are such that "absorption" can be practiced by any publisher at any distance, and that at small cost. We are glad to extend full permission to our foreign contemporaries to use our illustrations for the benefit of their patrons whenever they see in them the peculiar merit to warrant their reproduction.

UNTIL within a recent period a practical knowledge of photography was the exclusive property of those who earned their living by it; today the art is so simple, and the instruments and materials for taking pictures are so cheap, that it affords to youth an agreeable and profitable amusement, and to a great variety of trades and professions a most important auxiliary. But to very few if any professions may this simple art be made of more practical use than to architects. By the use of an amateur outfit, which may be obtained at small expense, they can in a few minutes secure an exact copy of any drawing, and the economy in time and money by this process, as compared with a copy by the ordinary method, is as one to ten, and the result is far more satisfactory, for there is no possibility of error in the reproduction. But its utility is not confined to the office. The architect may carry it with him in his rambles over the country, and find it a most enjoyable traveling companion, and a very serviceable one, for he can readily obtain photographic views of architectural studies that will be more correct in detail than he could obtain by any other means. Building sites, buildings in course of construction, or completed structures, may be quickly photographed, or sketches and drawings that he finds when away from home and that he deems worthy of copying. So many and important are the benefits to be obtained from the dry-plate process, it would seem that it must be an indispensable part of the outfit of every architect. The profession will do well to give the matter attention. Papers descriptive of the art in all its branches may readily be obtained from dealers in photographers' supplies, and the processes of making pictures and reproducing drawings are so simple that they may be quickly learned and successfully used for the benefit of the user particularly and the profession generally.

MANY of our readers have read the article in the May *Century*, contributed by Mrs. Van Rensselaer, on "Good Architecture," but we cannot resist the temptation to commend the pleasant way this lady has of putting a point on a worthy subject. "One rule, moreover," she observes in the course of her article, "may be laid down to guide our criticism. This is the rule that as a work of architecture is both very conspicuous and very long-lived, its aim should be 'to satisfy and not to startle.' The fact that a building is 'striking' is often held to prove it fine. But the best buildings are those which, whether striking or not — oftener not, perhaps, at least in modern work — will seem better and better as the days go by; will not grow oppressive or aggressive or impertinent, or tame, flat and uninteresting, in proportion as they grew familiar." The correctness of this observation will hardly be called in question.

QUITE an interest is being manifested by the profession in the forming of a Western Association of Architects. A number of prominent architects have made expression, in person or by letter to us, deploring the lack of interest in the West and Northwest in existing organizations, and recommending a distinctively Western association, having kindred aims and being in harmony with present organizations. They believe that the only way in which to awaken a lively and active interest in the West in an association is to make it Western and adapted specially to the needs of the West. The great advantages of such a band of brethren in promoting and elevating the work of the profession, and in a social way, are obvious and important. We are heartily in accord with any movement that will benefit the profession, and believe that, with the support and active coöperation of the leading architects in the West and Northwest, an association can be formed in which the profession in this section will take a live interest, and the beneficial fruits of which will be more and more apparent from year to year. The time seems ripe for such an organization, and we invite further expression and suggestions to that end.

WORK on the Home Fire Insurance building is progressing rapidly. The first story and basement will be of Jonesboro rose granite, with Trenton pressed brick and Vert Island red sandstone trimmings above. The ironwork will be furnished by the Dearborn Foundry. It is the company's intention to make this a model office building, not losing sight of the fact that it is a commercial enterprise, and as in exterior design and interior plan the architect has been admirably successful, the renting of the building will be accomplished without trouble, as the demand for convenient office quarters will be fully met.

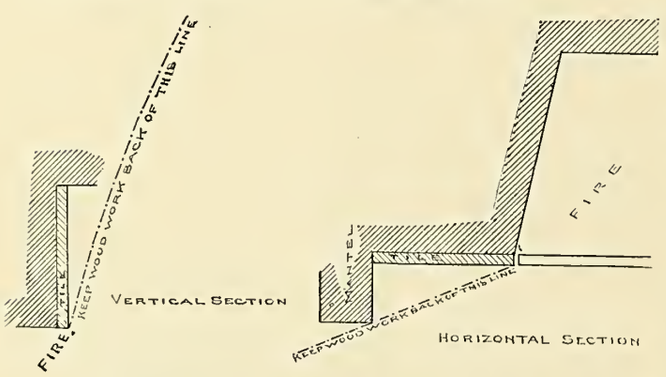
Mantels and Grates.

BY FRANCIS LE BARON.

AN open fire is the soul of the room; it gives it vitality, life; it draws the household around it in pleasant, cosy chat. As the body without the soul is dead, so the room without the fire is dead also. Setting aside for a moment the mere utility of the open fire as a means of ventilation and purification, let us remember that it has its spiritual, its poetical, its æsthetic side, which is good for all men. As the soul is beautiful shining out from a beautiful face, so a fire is more beautiful, shining out from beautiful surroundings, and the grate and the mantel become important features in the room. Marble mantels have their beauty, and their appropriateness in certain places,—as, for instance, in vast halls, where grand architectural effect is desirable; but, to our taste, not in a home, not in quiet domestic architecture, not in the family room, where the household gathers in the ordinary daily life. Marble belongs to the cemetery; it has a monumental, "*memento-mori*" quality which unfits it for domestic use; and when I see a marble mantel or a marble table in a home, I involuntarily look for the "*Hic jacet*" which seems to belong to it. It is like a monument or gravestone brought from the graveyard and put to domestic use.

Wood mantels have all the qualities that household use and beauty demand. What a wide range they offer in color, so that all tastes can be suited and all styles of decoration find a harmony. We may choose the delicate purity of whitewood, or the golden glow of pine, the fine red of cherry, or purple amaranth, or the rich grain of oak and ash, or the glow and splendor of mahogany, or the dusky gleam of black walnut, or the fine, soft finish of birch, or we can bring into our service unnumbered foreign woods to make beautiful the fireplace and set a fitting frame around our beloved fire.

And just here let one thing, and a very important one, be said. *If you put wood into the fire it will burn!* Many of our designers of wood mantels forget this, and their florid efforts blister and burn to the despair and vexation of the careful housekeeper. The mantel-shelf on its under side becomes a mass of blisters; the columned or bracketed sides char and blacken, and the open fire that should give only pleasure is regarded with anxiety, lest it should have in it the terrors of a conflagration. Now all this can be easily avoided. *Keep your woodwork within the line of safety.* This *line of safety* is easily determined. We give the result of long years of experience in mantel and grate setting, of a scientific, thoughtful man, and if his rule be followed, it will result in entire safety to the most delicate wood mantel, so far as burning is concerned. The rule is as follows: From the front line of your fire draw a line at an angle of about fifteen degrees (15°), and keep all your woodwork behind that line. This is for the sides. For the top, draw from the top of the fireplace opening a line at the same angle, fifteen degrees for a foot above the opening, and then change the angle to thirty-five degrees (35°), and keep mantel-shelf and all the top woodwork behind this line, and you will have no more charred or blistered wood, no matter how hot the fire. To make the matter plain, a sketch of the "*line of safety*" for wood mantels is given.



In wood mantels every taste may be gratified, and the field for design is infinite. The Gothic, the Renaissance, the Colonial, the Queen Anne, offer themselves in all their thousand modifications and combinations to suit modern convenience. A half century ago all our houses had wood mantels; it is no new fashion. The Colonial mantels were all brought from England, as in fact were all the materials for the house. Many of these houses may still be seen in Salem, in Marblehead, in Plymouth, and many other old towns of New England. A friend thus describes to us some old mantels which would be the delight of the art-lovers of today. "Wooden mantels are no new things. They were plenty before marble was thought of, and were of elaborate patterns. Some fifteen years ago I was present at the demolition of an old house in Maryland, built when Anne was queen of England. It contained two mantels of English oak, one at either end of the large parlor, with enormous fireplaces, the mantels covering the entire end of the room, with cabinets, and shelves, and cosy nooks and corners without stint. The pilasters at the lower parts were worn away by the attrition of several generations of shovels, tongs and pokers, which had leaned against them, but otherwise the mantels were in perfect preservation, with joints as good as new. They had a multitude of small, deeply-moulded panels, the product of Anne's time, and the wood was nearly as hard as iron. The facings were of large black brick, and no trace of fire was visible in any part of the woodwork, although it had been in use a hundred and sixty years.

The artisans of those times put their lives into a piece of work with far more persistency than is done nowadays. It must have taken a workman an entire year to make one of these mantels, unassisted by modern machinery." In those days the chimney-stack was in the center of the house often, a vast structure in itself, a tower around which the house was built. The fireplaces were vast caverns; a tall man could walk into them without bending his head, and they were twelve feet or more in width. It was an old saying that there was space enough for an ox-cart and a yoke of oxen to be driven up the chimney. In some of the old Colonial houses still standing in Marblehead and Salem, Mass., there are wood mantels covering the whole side of the room, with delicate mouldings worked in the solid wood, not glued on in the fashion of today, the panels enriched with carving of flowers and foliage in the very best style of the art.

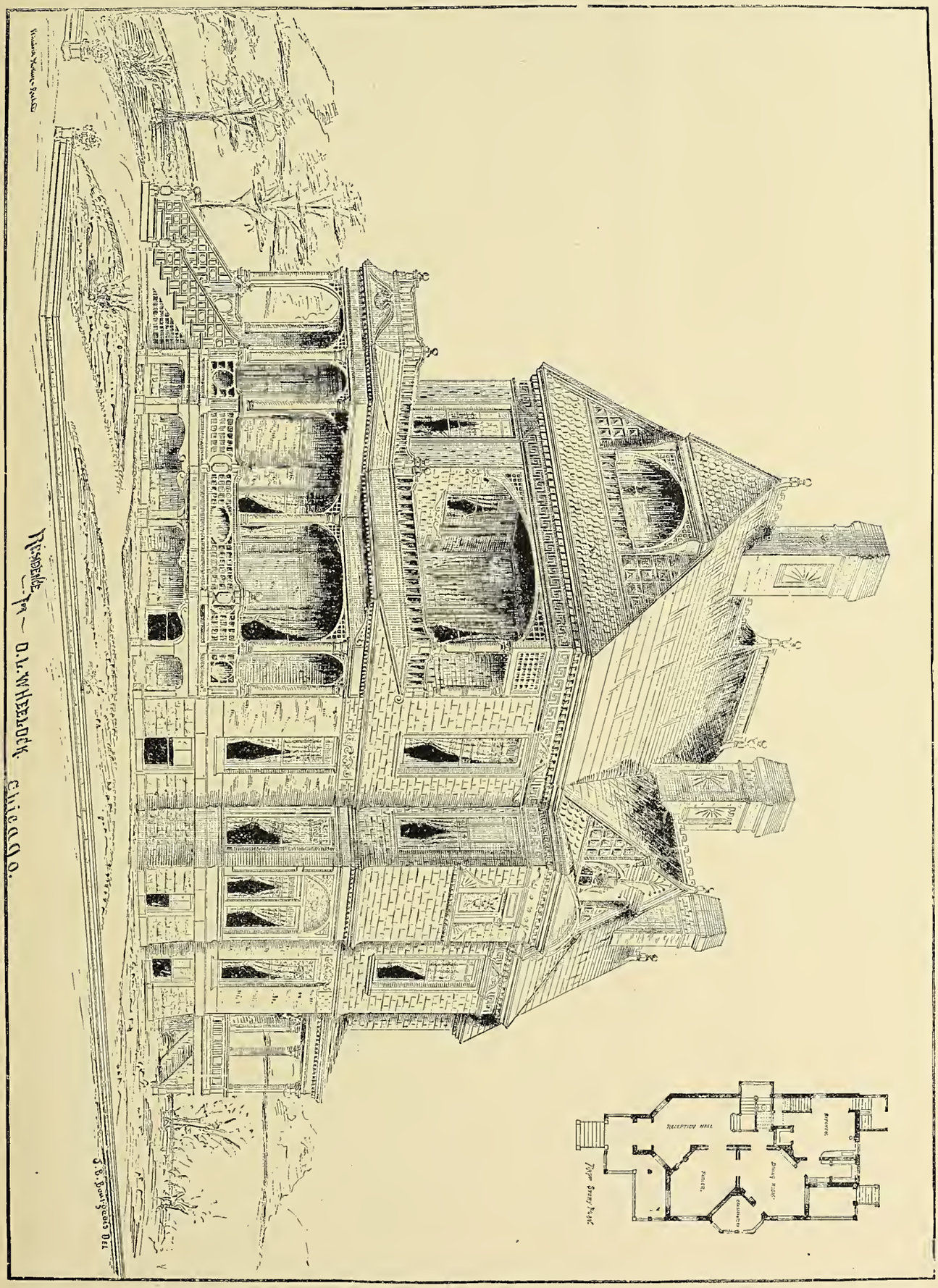
Today comfort has banished the vast cavernous fireplaces, but the open fire is just as cheerful as of old, in its more modest surroundings. A half-century ago there was a raid made on the old-fashioned wood mantels, and, with all their quaint carving and delicate mouldings and panelwork, they were swept out for kindling-wood, and everybody set up in his house the black and gold Egyptian marble mantel. But the reaction has come with an increased civilization, and wood reasserts itself. Wood mantels, tile facings and tile hearths are now the fashion, and a beautiful fashion it is. Long may it last!

In a saunter down Wabash avenue one may see what beautiful things have been done in this line, and how beautiful a feature in domestic architecture the wood mantel, with its tile facing and tile hearth, has become. One feels as he looks into Bruner & Lancaster's, or A. H. Andrews & Co's, or into Albert A. Riley's, or Dibblee's, or the Butler Co's, or into Mr. Lord's new room, at Tobey's furniture store, and sees the beautiful tiles and mantels and grates, as if here were the places to spend money to get the most pleasure and satisfaction from it, and as if the open fire and its surroundings were the principal feature of the house. The Low art tile becomes more and more beautiful and desirable, and there are other very beautiful varieties of tile of American manufacture. Mr. Riley shows some very handsome hand-painted tile, in continuous landscapes; they are French, and he calls the style "Barbotine." They are entirely new in the market. At the Butler Co's may be seen a fine display of mantels and grates. The grates most in use are the clubhouse, the portable basket, the peerless and the reversible, and Mr. Lord shows a grate of his own arrangement, with sliding damper and sliding crown-piece, which will keep a good fire from Saturday night till Monday morning without being touched. All these grates can be had cheap in simple iron, or can be made as handsome as one wishes with bronze and silver plate.

The plain tinted tile are becoming very beautiful; some of the English and French glazes are exquisite, and for facings and hearths they are very desirable. France is sending us some new and very beautiful varieties of tile; the newest and most desirable is the Faiencerie de Gien,—a variety just coming into use in the best houses in New York. It has not yet been used in Chicago. There is one bathroom in Mr. Plankinton's house in Milwaukee finished with it, and I am told it is the prettiest thing in the house.

The Nolla tile, made at Valencia, in Spain, is also very artistic, and is coming into use. Mr. Bates, who has always some fine artistic work to show, now in stained glass, now in exquisite carving, and again in elegant furniture, or drapery, or fanciful and novel decoration, has just completed two notable mantels; they are features in the rooms for which they were designed, being eight feet wide by fourteen high, and projecting two feet and a half. One is of red oak, paneled in white oak, the other of mahogany. They are in the Italian Renaissance style, and rich in very beautiful carving.

Architects Burling & Whitehouse are preparing the plans for St. Clemens Episcopal Church, to be erected at Twentieth and State streets. The style will be modern Gothic. The body of the church will be 38 by 100 feet and measure 44 feet to the peak of the roof, the side walls being 14 feet high. There is an excellent arrangement of vestry, choir, organ-loft and lavatory, besides which the seating capacity will be about 300. The construction will be substantial stone foundations, Anderson pressed brick walls, metal roof, with stained glass windows, etc. The cost will be $20,000. These architects are also about to let contracts for a row of six buildings for Chas G. Wicker, on Cottage Grove avenue and Thirty-eighth street. They will cover 138 by 77 feet. The first story will be for stores, with two stories for flats above. They will be built of pressed brick, finished in plate-glass and perfect in appointments. The cost will be $7,000 each.


Residence for D. M. Hubbard, Esq. Oconto, Wis.
Wheeler & Walker, Architects
J. B. Bourgeois Del
RECEPTION HALL
PARLOR
DINING ROOM
KITCHEN
PIAZZA
Upper Story Plan

Development of American Architecture.

R. H. VICKERS.

THE heterogeneous combination of incongruities frequently observable in buildings, especially for church purposes, in many of our American towns, is not a subject for surprise, hardly one for regret. Our people formed structures that suited their simple tastes, and the diffuseness of style, to say the least, marked the absence of restraining and overawing influences. No fettered minds were those that raised church edifices after any fashion that suited the builders. Assuredly the iron of conventionality and prescription had been broken when men raised the edifices that supplied the ordinary worshipers of America with sanctuaries. But since the first feelings of animosity toward the spirit supposed to reside in the "steeple-houses" of the older communities has subsided, and been replaced by softer feelings, mellowed by time, the spirit of architectural taste in public and private has assumed much of its natural expansiveness among us. In searching for models and designs embodying taste and appropriateness men have often asked, "Should we not adopt a style peculiarly American?" The Egyptians, Greeks and Saracens had their peculiar combinations of architectural outlines and elements, and from them modern nations have borrowed, and thereby constructed new ideals suitable for national wants and environments. Should not we do the same?

Omitting the important fact that all these styles were the result of growth, and did not spring from the originating genius of any man or any generation, we may observe that none of the nations mentioned began with the intention of establishing a peculiar style. They built according to their ideas, and a certain type was gradually reached. That type became the national model; and when it had embodied all the elements it could assume, all attempts at progress led inevitably to deterioration. That combination of outline and components which was appropriate to climate and purpose acquired fixity. No room was left for variation, much less for novelty, because certain ideas were embodied in stone and column; and the rigidity of the purpose precluded all departures from the arrangement assumed to be the only one suited to that purpose. This rigidity of form constituted a powerful support to the doctrines originally embodied in the form. The national life lived in the stone, and men became almost incapable of any other association of ideas.

But the moral and political intentions and free expansiveness of the human mind cannot thus accept limitations from the fixedness even of the grandest human handicraft. Independence of thought inevitably produces elasticity of skill. New wants and expanding tastes call for fresh exercises of combination and invention, while retaining fundamental principles of safety and of proportion. Ever multiplying harmonies suggest themselves to the activities of invention and search, as well as the requirements of improved accessions and surroundings, and progress in the arts. Ethics always assume the highest place in a thinking society, and hence the tyranny of symmetry, contour, coloring, deep shades and solemn blendings, coupled with realistic carvings, and perchance the menace of the mighty unseen portentously signified by shapes that seem to carry a revelation from some other world, yield to the potency of cultured reasonings about the higher laws of moral duty and logical truth. Reason ceases to be deprived of her analysis, and is no longer overwhelmed by the sensuous. With the multitude of men, however, fixity of idea, embodied in magnificence of proportion, exercises first an oppressive and then a corroding power. When the mass of mankind becomes bound to fixed ideas of form, and the equally fixed spirit or principle that lives in it, or the still more rigid doctrine expressed by it; when outline becomes stereotyped and identified with national taste, a serious impediment to mobility of thought is at once created. A mortal immobility of soul and an avidity of intellectual susceptibilities creates an induration of feeling hostile to all freshness of form or propriety of adaptation. Men become slaves to their own creations, and the latter dominate like a contagion. The genius which originated the creations themselves is attributed to an age of superior merit and to a higher race of men. It was the emancipated mind and the free philosophy of Attica that clothed the conventional style of Greece in more varied and more charming raiment, afforded opportunity for diversity toward associated groupings, and led to freshness and originality in new departments. The investigating genius of the people rendered progress not only possible, but inevitable. The national games which promoted the arts of music, poetry and song originated the Corinthian style about B.C. 330. The tasteful genius which intertwined the emblems that recompensed merit in these revelries into new combinations, and attached these novelties to the older central style, conferred fresh impetus on skillful composition and encouraged freer play of individual discrimination. The fixity of Egyptian art, as well as of that of the Pelasgi from Cappadocia to Greece and Etruria, was at once the cause of sterility of mind in its founders and of its own resulting decay. An effort to create a taste by a novelty is always associated with narrowness and incongruity, as in the case of the Christ in Mosaic at Pisa, which expresses the fixed passion of Jacopo Tanita, the restorer of Mosaic, to subordinate all objects alike and all proprieties to his recovered art. The result has been equally lamentable where taste has assumed a national fixedness and rigidity. A grotesque conventionality is the morbific result. But it is to the star of hope and of life, that elasticity of spirit and progressive earnestness which results from changeability and necessity of adaptiveness, which peculiarly distinguishes Americans and their environments, that we are to look for the most lovely efforts of genius. It is to the growing time of our nation—and that time must long continue—that the formative expansiveness of national art must lend its charms. The prevailing tastes and capacities of our people will speak through their constructions, and no limitations can be assigned to either. In order to progress and improve, we need not imitate Chilperic, who imposed penalties on the forbearance to destroy ancient circles and monoliths; nor need we limit ourselves to official genius, like the republic of Florence in 1294, who ordered the communal architect to prepare plans "so that the industry and foresight of man should not be able to undertake anything more spacious or more beautiful." We can safely leave the growth of architectural supply, in grandeur, in form and proportion, as well as richness and harmony of details, to the advanced taste and more liberal and comprehensive requirements of a people whose growing wealth and brighter perceptions will encircle themselves with the glories of construction and handicraft.

Fire-Resisting Construction.

UNDER the above title a late issue of the *Building and Engineering Times* publishes a paper which treats almost wholly of American terra-cotta fireproofing, but which is designated in the article in question as "Terra-cotta Lumber." The American method of applying porous tile to girders, columns, floors and ceilings, to judge from this article, is something almost wholly unknown to English architects, for in the introductory paragraph allusion to it is made as follows:

"There is a material used in fire-resisting buildings by the Americans which appears from the description given of it to possess numerous advantages over those at present used for the purpose of this special class of construction. This material is known as terra-cotta lumber, and the useful and novel properties characterizing it give it an almost unlimited range of employment in science, art and mechanics. It is indestructible by fire, water, frost, gases, acids or age. Its porosity gives it large molecular and capillary attraction. It is a very poor conductor of heat, dampness, sound and electricity. It neither expands nor shrinks under extraordinary and sudden changes of temperature. It will resist the hottest flame for any given length of time. Its weight is one-half that of brick, two-fifths that of marble or granite, and one seventh that of iron.

"These unusual advantages which this substance is said to possess, supplemented by its extreme cheapness, and above all, its susceptibility of mechanical workmanship, are qualifications possibly not possessed by any other known building material.

"The manufacture of this terra-cotta lumber requires the buildings in which it is made to be of the simplest description, and there is no special construction in the machinery or kilns to render the introduction of terra-cotta lumber works into this country a matter of difficulty.

"*As no experience of the use of this material in actual construction has been had in England*, it must be understood that the following description has been obtained from numerous reliable sources, and from the examination and testing of samples of the material. Experience will alone decide what its real uses will be."

The article then proceeds to describe the "material" used in its manufacture, and proceeds to say:

"The English architect has but a limited choice of materials of a satisfactory fire-resisting nature wherewith to construct his buildings. These may be summed up as brick and terra-cotta. For the construction of walls, however, the latter is too expensive for ordinary use. Consequently brick is the only material which can be relied on as absolutely safe against the all-devouring element. Even this material has its disadvantages. Its size is not suited to economic construction. This defect is, in a measure, obligatory, for the reason that the material of which brick is made, coupled with the manner of making, will not admit of larger bricks being manufactured. Even with the present size the loss by warping in drying, and cracking in burning, is considerable. The smallness of the bricks necessitates the frequent occurrence of mortar joints. The proportion of mortar to brick in a brick wall is as one to five. When a brick wall fails in a fire, it is consequent on the burning out of the cementing bond, making the damage as complete as if the material had been entirely devoid of fire-resisting properties. Brick, when used in the form of arching on iron girders, is of considerable weight, being about 115 pounds per cubic foot. This necessitates a considerable additional cost on the iron-

work alone. The same disadvantage applies to concrete, which weighs from 120 pounds to 130 pounds per cubic foot. What is required is a material combining lightness with a capability for resisting the action of fire. Terra-cotta lumber is a material which appears to have these qualities, being as 'thoroughly proof against fire as asbestos, as workable with edged tools as wood, and as cheap of manufacture as brick.'

"Not only iron but wood construction in any form may be encased with it, by being nailed in the ordinary manner to beams and framing. A building constructed with wooden beams, protected with a casing of terra-cotta lumber, is practically fire-resisting and probably more reliable than iron in the heat of a great fire. Such an assumption is supported by experience. American architects are said to prefer the introduction of timber for floors and supports rather than iron joists. Mr. Arthur J. Gale, the holder of the 'Godwin Bursary,' in his paper on 'American Architecture, etc.,' read at the Royal Institute of British Architects, on his return from his tour in America, alluding to the systems of fireproof construction adopted in that country, observes: 'The manager of a fireproof construction company gave me some interesting particulars. His motto is, "No building can be fireproof unless all constructive ironwork is protected." But if ironwork be not used they protect the wood floors; in fact, they prefer this method. The joists are carefully gauged as to distance apart, varying with the thickness of joists, so as to allow of deafening with brick laid on fillets like ordinary pugging. This is carefully bedded in fine concrete, and the whole covered with a tile, concrete or boarded floor. Underneath is fitted a ceiling of porous terra-cotta (terra-cotta lumber) or cement tile. Countersunk recesses receive a plate of iron, which is screwed into the joist, thus clipping the terra-cotta or tile to the joist; two adjoining tiles, all laid dry, are thus supported. The joints are then pointed in plasterer's stuff, and the plastering finished in the ordinary way.' He further adds that all iron columns, joists and girders are protected with porous terra-cotta, and that the covering is solidly fixed and will withstand blows of falling materials, etc.; and that porous terra-cotta is likewise used for covering the sloping timbers of roofs; furrings inside brick or stone walls, and for attachment to floors having iron girders and segmental arches already existing.

"The manager of the Fireproof Construction Company, Mr. P. B. Wight, referred to by Mr. Arthur J. Gale, in his paper previously quoted, has patented a method of sheathing columns, ceilings, and iron girders, etc., with terra-cotta lumber. *There cannot be a doubt but that the introduction of this useful material into this country would mark a new era in fire-resisting construction.*

"As previously stated, the use of supporting timbers in large pieces in conjunction with terra-cotta would produce a building the fire-resisting properties of which would be equal to any known combination of materials when subjected to the dual influence of fire and water. The cost of a theater, whether constructed with wood or iron supports and terra-cotta lumber, would be considerably less than that involved in the ordinary iron, concrete, brick and stone combination.

"The whole of the stagings of the several tiers now constructed with wood could be protected by terra-cotta lumber, and in fact many of the structural parts could be constructed with this material with about one-third the weight of iron usually used in an iron and concrete building."

Some of our large terra-cotta manufacturers should see to it that their interests are fully represented in England. There certainly seems to be a wide field for them there, and it may be the United States can give to English architects valuable suggestions in the way of fireproof construction.

Brick and Brick Machines.

LETTERS of inquiry from architects and others have been received regarding the merits of different brick machines used about Chicago. The more common is the ordinary "mud" machine, and the Gregg, Chambers, and others of popular make, are also more or less successfully used. But investigation shows that it does not so much depend upon the mechanical perfection of the machine — though of course this is an important factor — as upon the quality of the clay to be worked. For instance, a machine that was a failure at Duluth is doing admirable work in Chicago clay, and one that works indifferently in Chicago clay is a perfect success at Chester, Ill. This fact seems to apply to machines generally, and the best way to secure a brick machine is to work some of the clay it is intended for before purchasing. One of the largest yards in Chicago, and one of the few that are in operation the year round, is that of the Purington & Kimbell Company, and to thoroughly investigate the merits of the Chambers machine as well as to see what was reported to be a model brickyard, this company's works, in the southwestern part of the city, were visited. The plant is using two machines, and has a capacity for about 100,000 brick per day. The clay is obtained from the bank of a canal, and has, during the years since its excavation, been exposed to the freezing and thawing of several winters. The bricks come out symmetrical, and nine-tenths of the ordinary product would be pronounced good sewer-brick, so well made and shapely are they. The crushing strength of ordinary Chicago common brick is said to be about 11,800 pounds to the square inch, while the claim is that these brick will sustain 22,700 pounds to the square inch. Walls of this brick were examined that in face and in corners showed almost the symmetry of pressed brick. These works have been running in their present shape over two years, and have produced about 27,000,000 brick, working summer and winter. This yard, though perhaps in completeness a little in advance of other Chicago yards, represents but one of the hundreds with which Chicago is surrounded, and the prospect is that the supply of brick for building will always be ahead of the demand, and at a low price, except when a phenomenal building season exhausts the winter's stock and obliges contractors to send to other cities for brick, which occurred to a very small extent this spring, and may never occur again. Included in the Chicago brick supply should be the Indiana pressed and common brick, which are operated by the company already mentioned and several others, and as the clay used is well adapted to brickmaking, the pressed brick made from it entering largely into fronts of Chicago buildings. Enough good brick is now made around Chicago to allow a choice, and builders are making it, and those who would compete for the best trade find it to their advantage to use good machinery, good clay and good workmen in their works. In speaking here of the Chambers machine, it is not the intention to recommend it, but rather to use it as an example of what is done in common brick manufacture, and to show those who are interested what Chicago is doing in the making of this material.

Our Illustrations.

Page 55, details for cottage published last month to cost $2,300, by architect Julius H. Huber, Chicago.

Page 53, St. Paul Chamber of Commerce, by architects Carpenter & Teltz, St. Paul. The description of this structure, forwarded us by the architects, has been mislaid, and a description will be postponed till next issue.

Page 49, residence for architect O. L. Wheelock, by architects Wheelock & Clay, Chicago. The residence is on Ellis avenue, near Oakwood boulevard, and will be a model of exterior beauty and interior arrangement. It is 60 by 33 feet. The basement will be of brownstone, with a first story of Anderson pressed brick with brownstone trimmings, and the second story with substantial brick walls covered with red slate. The walls and chimneys will be rich in terra-cotta ornamentation, panels, etc. The roof will be of black slate. The interior will be finished in common pine polished in the natural wood, and the staircase will be of polished red oak. The heating will be done by steam. A peculiar and commendable feature is in the disposition made of the sewerage. No pipes will be laid under the house, iron pipes being placed in the ceiling of the basement connecting with the sewer outside the house. The arrangement of the floors gives to each room an extraordinary amount of room and light. The barn is also of brick, plain and substantial. The cost of the completed house will be about $16,000, and Mr. Wheelock, one of the oldest and best-known of Chicago architects, is to be congratulated upon the planning for himself what he has so long been giving to others, a well-built, attractive and convenient residence.

Supplement.—Manufacturing and salesroom building, for E. Jennings & Co., West Madison street, Chicago, by S. S. Beman, architect. This building, the first and still the best improvement that has been made in the line on the west side of Chicago, is 100 by 95 feet, six stories in height, and is built of St. Louis pressed brick. The roof is of the best red slate, and the front is ornamented with terra cotta and also of galvanized ironwork, the latter feature being a remarkable example of the ornamental possibilities of this metal in competent hands. The ornamental ironwork is also noticeable. The interior construction is extraordinarily heavy, for the purpose of making it secure, and is arranged in the most complete manner for manufacturing purposes, while the first and second floors, with fronts almost entirely of plate-glass, are handsomely fitted up for salesroom purposes. The machinery is in a four-story building, 50 by 100, in the rear, from which shafting is run to the main building for running sewing machines, etc. One department of the building will be used by the company for the manufacture of all the interior drapings and car-furnishings used in dining and sleeping coaches. Another department will be devoted to laundry, and one to shirt-manufacturing; while a fourth will include all the lines of gents' furnishing goods. The building as planned by Architect Beman, and executed under the superintendence of architect Schock, for these purposes, is one of the most complete and substantial of its kind ever erected in the West.

Architectural and Building Notes.

THE Pioneer Fireproof Construction Company will soon remove to their new fireproof building, which is about ready for the roof.

THE Wight Fireproofing Company have removed their office to No. 202 La Salle street, where they have fitted a commodious office with samples of their fireproofing work, especially their ornamental plastering and scagliola work.

THE plans for the Marshall Field office building are being rapidly prepared by Architect S. S. Beman, and the work of erection will commence about June 1. The details of construction have been nearly all decided upon. The building will be 95 by 190 feet, and eleven stories and basement in height.

ARCHITECT W. W. BOYINGTON will immediately erect the towers that have long been lacking on the corners of the Lake Shore and Rock Island Railway depot. They will be built of stone and will be 170 feet high. This architect is also erecting two important stove warehouses. One is for Rathbone, Sard & Co., on Clinton street, near Harrison, 96 by 145, six stories high. It will be substantially built of the Purington & Kimbell Co. common brick, and one for Greenly Bros., 50 by 145 feet, four stories, with pressed brick front.

ARCHITECT S. S. BEMAN is preparing plans for the building up of what will be called Rosalee Villas, in the neighborhood of Fifty-seventh street, for Messrs. Chandler & Co. There are now under contemplation two villas

for Addison Ballard, Esq., at $4,000 each, a music hall, to cost $20,000, and Rosalee Inn, to cost $30,000, besides many residences in contemplation, the tract, one-quarter of a mile in length, being planned for the accommodation of about fifty residences, all of which are to be unique in architectural style, and arranged to give the perspective something of the picturesque.

ARCHITECT J. J. FLANDERS has prepared elevations, plans and specifications for a ten-story office building, to be immediately erected on the corner of La Salle and Quincy streets, for Mr. Mallers. The lot is 40 by 60 feet, and the building will join the Royal Insurance building on the west. Of the walls, the first and second stories will be of granite, the third of bluestone, and the remainder of pressed brick and terra-cotta. It will be thoroughly fireproofed with tile partitions, roof, etc., as all first-class buildings now are, without exception, in Chicago, with fireproofed iron stairs, etc. A unique feature and a thorough novelty will be the windows, which will all be constructed flush with the outside walls, similar to our latest store-fronts, and a slightly projecting bay running the entire height of the building. The vaults will be in the street corner, and their construction will add to the massiveness of the structure.

ARCHITECTS BURNHAM & ROOT have prepared elevations and plans for a skating rink to be erected on the part of the old Carpenter homestead cornering on Curtis street and Washington boulevard. It will be 125 feet on the latter street and 200 on the former. The walls will be of pressed brick, one-story high, the slate and metal roof being pierced with dormers, and otherwise exceedingly ornamental, will add another half-story to the structure, and on the whole the improvement will add to the attractiveness of this portion of the west side. The building will be owned by a company embracing several prominent business men, C. L. Willoughby, F. H. Stanwood, J. J. Read, and David K. Hill representing them. The cost will be about $50,000. The Loomis building, which will be erected immediately on Adams and La Salle streets, from plans by these architects, by a company of which William K. Nixon is the manager, will be 60 by 165 feet, ten stories in height, will be thoroughly fireproofed, and the walls pressed brick and terra-cotta.

Mosaics.

THE stained glass manufacturing firm formerly known as Kinsella & Haywood is now H. F. Kinsella & Co.

THE Chicago branch of the Clinton Wire-Cloth Company, of Clinton, Mass., has removed to 137 Lake street, where a specialty will be made of their wire, lath and other wire-cloth material.

THE Chicago branch of Berry Bros., of Detroit, manufacturers of a hard oil finish that has become popular for its adaptability to all kinds of hardwoods, have removed to corner of Fifth avenue and Quincy streets.

AN excellent pressed brick, both in color and texture, manufactured by Harris Brothers, of Zanesville, Ohio, is being introduced in Chicago by Messrs. Abbott & Taggert. Harris Brothers make moulded and enameled brick as well. The Chicago agents are located at No. 65 Washington street, but will remove about the 15th.

MR. TRUE WILLIAMS, formerly a well-known engraver in Chicago, and for the several past years earning a national reputation through his work in New York, is again located in Chicago. Mr. Williams' facile pencil and engraving skill is reported to be engaged in the work of perpetuating the faces of several prominent citizens.

C. J. L. MEYER & SON have fitted up a showroom especially to display their stock of wood mantels, which are made from special designs, and with their extensive facilities for manufacture and the extensive practical knowledge of woods possessed by this old firm of millmen, the reliability of any work of their manufacture cannot but be all that is desired.

CONTRACTORS will be interested to learn that a branch has been established in Chicago for the sale of the Seyssel rock asphalt, which has been used in the principal cities of the United States for the past fourteen years. Seyssel Rock Asphalt is a material largely used in the East for floors, cellars, roofs and sidewalks. The company's agent, Mr. T. H. Boorman, has offices in the Builders' Exchange.

THE Tahanto Manufacturing Company, of Boston, who manufacture a new line of interior decorative metallic materials, in bronze, copper, brass, silver, etc., have appointed Mr. Frank W. Balch, of 99 Washington street, their Chicago agent. As this is a new line of goods in Chicago, architects will find an inspection of the samples now on hand quite a novelty. This material is shown in rich designs in the new Wells residence, and is to be used in the new Pullman office building.

SEVERAL prominent residents of Nashville, Tenn., recently took advantage of Mr. A. S. Hopkins', of Henry Dibblee & Co., Chicago, presence in that city, where they have furnished a large amount of Low tiling, to obtain these excellent English tiles for their houses. The Hon. D. T. Porter, among others, ordered an elegant tile floor for his hall, to be made from special designs. This use of tile floors is a pleasing comment on the growing artistic taste among the people of the South.

AN exceedingly interesting exhibit is made on the main floor of the establishment of S. A. Maxwell & Co., it being an octagon-shaped cabinet, ten feet high, showing the varieties of rich work to which Lincrusta-Walton is adaptable. It is especially fine, and should be seen by all architects and decorators This house also exhibits, in their wall-paper department, the richest designs in foreign and domestic goods, and it is a safe assertion to make, that no goods are too fine for this well known firm to handle.

ARCHITECTS WHEELOCK & CLAY have removed from the Unity building to an elegant suite of offices in the new Commercial National Bank building. The senior member of the firm has been located in the former building for twenty-eight years, excepting the brief "interruption" occasioned by the great fire, immediately after which the building was rebuilt. The offices are as light and well arranged as any in the city, and these architects are to be congratulated upon their possession.

THE "plant" for many years used for the manufacture of architectural ironwork at Fifteenth street and Dearborn by the Union Foundry, vacated for their new works at Pullman, has been fitted up, enlarged and improved for the same manufacture by Messrs. Cushing & Foot and called the Dearborn Foundry Co. The work of this company is already being largely sought after by the building fraternity, and as the managers are well known for their practical knowledge of the business, the success of the new company is assured.

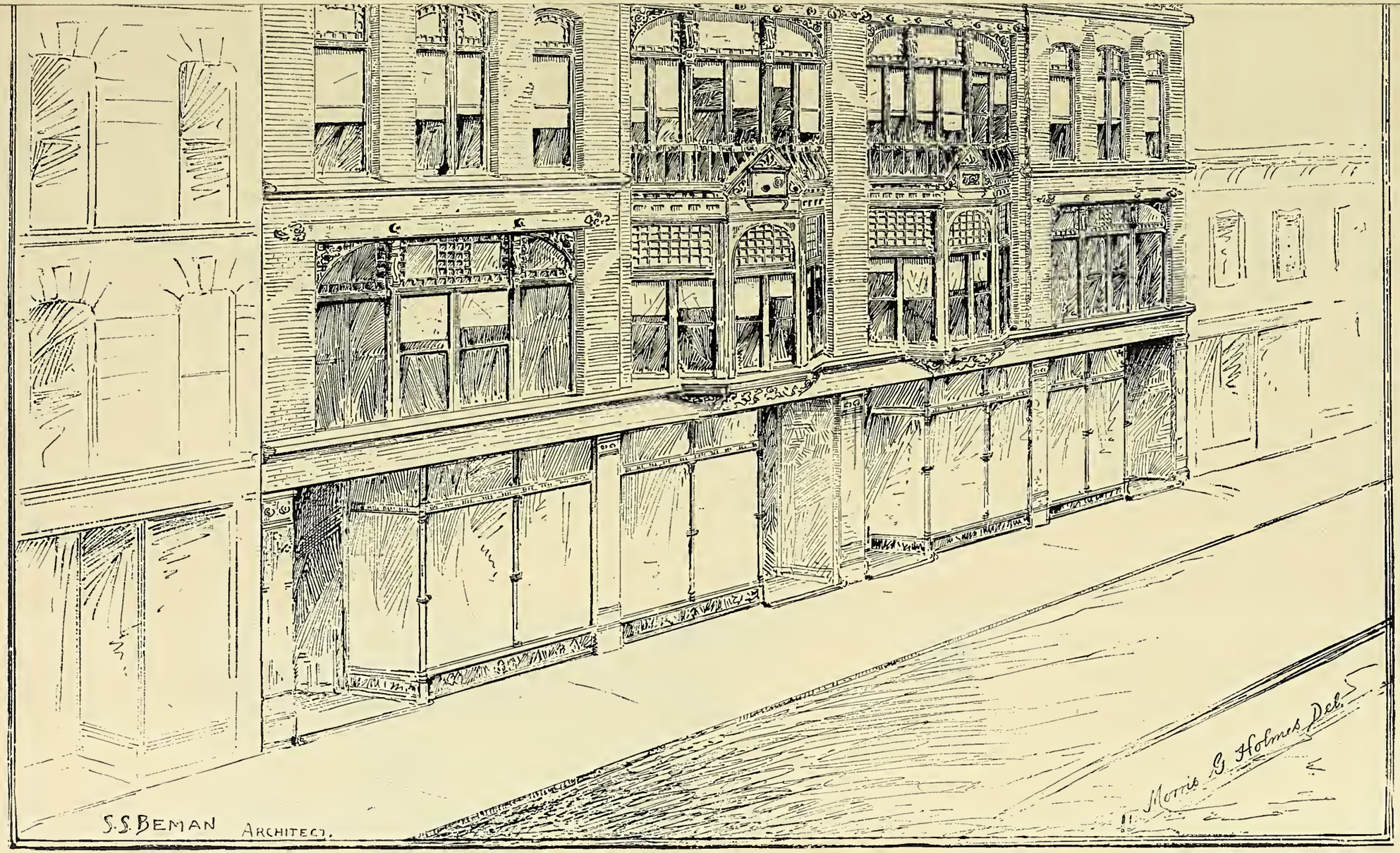
MR. H. G. WILLARD, representing the Archer & Pancoast Manufacturing Company, of New York, designers and manufacturers of fine gas fixtures, has come to Chicago, and leased the building No. 252 Wabash avenue for three years, with the purpose of fitting it up in an artistic manner and displaying to the fullest extent the goods made by his company. The fitting up will probably be completed in about a month. This, with the many fine display rooms of gas fixtures already established in Chicago, will give architects and the public all that could be gained by the most extensive travel in search of the unique and beautiful in the line of gas fixtures.

MR. S. W. ADAMS, the popular secretary to the Crane Brothers Manufacturing Company, has resigned his position, and has taken the building Nos. 173 to 179 Canal street, near Adams, formerly occupied by the Wilson Packing Company, where, with a space of 100 by 150 feet, two stories, he has engaged in the business of supplying wrought-iron pipe and boiler tubes, railroad track and locomotive supplies, steam and gas-fitters' tools, pipe for artesian well tubing, steam and water gauges, a full line of brass goods, steam radiators, rubber packing, and manufacturers' and merchants' supplies generally. Mr. Adams' extensive acquaintance among business men, combined with his exceptionally good business qualifications and his thoroughly practical knowledge of all the details of the business, should insure success.

THE use of terra-cotta ornamentation is rapidly growing in the West. The following buildings, reported by True, Brunkhorst & Co., the Northwestern Terra-Cotta Works, which are being decorated with this material, seem to show that it has justly become a necessary component of all building exteriors. In Chicago: Open Board of Trade, New Board of Trade, John D. Parker's office building, Royal Insurance Co. office building, H. Sibley warehouse, Pullman Palace Car Co. office building, Mandel Bros., Mrs. Catherine Price, Pioneer Fire-Proof Construction Co. office building, J. Rathborne's building, Dr. A. Brooks, Geo. M. Barber, Martin Barber, residence, Walter S. Peck, G. M. Miller, S. A. Kent, porch, F. C. Durand; in Minneapolis, *Tribune* building; in St. Paul, German-American Bank; in Kansas City, general office building Kansas City, Fort Scott & Gulf Railroad Company. in Omaha, Neb., Mr. Pratt's building; in St. Louis, Mo., T. P. Ridille's building; in Burlington, Iowa, P. A. Andre; in Detroit, Mich., A. C. Varney.

IT is gratifying to know that the manufacturing interests of Cincinnati are rapidly recovering from the effects of the late flood. A photograph of the works of the Cordesman & Egan Co., taken when the lower floors of the building were under water, has been received, which shows very forcibly the difficulties and disaster which they met with. They report that notwithstanding this their trade is extremely satisfactory in every respect, and they are running full time and full force on ordered machinery. In order to meet the demand for their product, they have been obliged to add quite a number of machinists' tools, and also put in a new cut-off engine of 150 horsepower, and likewise to make additions on the building. The company have perfected several new machines, among which is the new double cut-off saw, at which three men can work at once, if necessary, doing different kinds of sawing; also a new automatic knife-grinder, which, when once set, requires no further attention from the operator, but does the work and then stops. This machine promises to have a great run. They report that they are selling their new double drum sandpaper machine and their heavy band log sawmill as fast as they can be turned out.

AMONG the many devices of inventive genius recently submitted to the public for consideration and adoption, few will receive more generous attention and cordial approval than Herr's Combined Safety Heater, and the Herr Safety Hot Air Heater, designed by Mr. A. W. Herr, and manufactured by A. W. Herr & Co., of 248 Randolph street, Chicago. The first named is designed for use in railroad cars, halls, stores, dining-rooms, etc., and in addition to a large saving in fuel, its cleanliness, its usefulness in supplying hot air in great or small amount as needed, or in furnishing hot water or steam for charging steam fire-engines or locomotives, or for other purposes, its simplicity of construction and operation, and the many other claims made for it, that of being perfectly safe as a railway car heater, and saving passengers from destruction by fire, in case of a "smash-up," is, perhaps, the most important of its virtues. In view of the terrible loss of life resulting at various times from the burning of railway wrecks, a device that will avert such a calamity becomes one of incalculable importance to the public; and as this one has been subjected to and successfully withstood the most thorough and severe tests, it is destined very speedily to take the place it was designed to fill. The Herr Safety Hot-Air Heater is constructed on precisely the same principles, and for the same uses. Small sizes of this are made for street cars, bedrooms, etc. The improved ventilators, coalhole-vault covers and light registers manufactured by this firm are superior articles, as they combine the largest degree of utility with every convenience for their adjustment and operation. The admission of air and light to underground apartments is a matter of great importance, and the various devices of this company for these purposes are especially adapted for all kinds of subterranean chambers. Their catalogues and price-lists furnish all necessary information concerning these articles.



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MANUFACTURING AND SALESROOM BUILDING FOR E. JENNINGS & CO.,

399 to 405 WEST MADISON STREET, CHICAGO.—S. S. Beman, Architect.



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ST. PAUL CHAMBER OF COMMERCE.—Carpenter & Teltz, Architects, St. Paul.

New Publications.

THE AIR WE BREATHE AND VENTILATION. By HENRY A. MOTT, Jr., Ph.D. New York: JOHN WILEY & SONS. Cloth, price $1.

This volume of eighty pages treats of the properties, uses and abuses of the "air we breathe," tells how a vitiated atmosphere injuriously affects the persons who dwell in it, and how it may be kept pure in the dwelling-houses of people. The subject is one that deserves far more attention than it receives. The matter of ventilation is too often committed solely to the contractors and builders. The occupants of houses should be conversant with the subject, and the ways and means of supplying buildings with an unfailing supply of fresh air should be fully provided for in the plans and specifications. There is nothing, in all the economic provisions of nature for the support of animal life, so essential as pure air, and this can only be obtained by constant renewal. Dwelling-houses demand a free circulation of air just as imperatively as do the lungs in human bodies. In the cleanest rooms the air is just as liable to become foul as is the water in stagnant pools. Air and ocean,—aye, the universe,—are kept in constant motion by an inexorable law, and this law is the law of all life. It is important, therefore, that a matter of such vital importance should be understood. This book treats of the ventilation of houses, and discusses the merits of several systems. It contains much valuable information upon the subject, and we commend it to our readers as worthy of a careful perusal.

HANDBOOK OF SANITARY INFORMATION FOR HOUSEHOLDERS. By ROGER S. TRACY, M.D., Sanitary Inspector of New York City Health Department. New York: D. APPLETON & CO., 1884. Cloth, price 50 cents.

This volume of about one hundred pages embodies a great deal of useful information upon the subjects of air, ventilation, drainage, plumbing, disinfection, treatment of contagious diseases, and other matters relating to the personal comfort and welfare of humanity. The book is illustrated by diagrams wherever they could be advantageously used. The language is clear, plain and concise, and the work will undoubtedly find a large sale. There are a few points that are open to controversy, and some of its recommendations are not, perhaps, the best, but these are of small importance as compared with the value of others. The chapters on ventilation and drainage and plumbing are especially good. The book is well worth all it costs to any who desire information upon any of the subjects of which it treats.

SHAVINGS AND SAWDUST is the title of an excellent book published by C. A. WENBORNE, of Buffalo, N. Y. MR. JOHN KANE, of Buffalo, N. Y., the author, has had a long experience as a builder and operator of wood-working machinery, and the practical views and suggestions of a clear-headed man are expressed in a very agreeable manner in the thirty-seven chapters which the book contains. The right and wrong ways of doing things in the shop are clearly set forth. Price $1.50.

Inventive Genius in Building.

296,305. Brick Machine. John Baillie, Salem, Ohio.
296,313. Bracing the Piles of Piers. Aaron B Burton, New York, N. Y.
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296,320. Gas Burner for Heating and Lighting Rooms. Benjamin F. Enoch, Philadelphia, Pa.
296,324. Fire and Water Proof Paint. Marion O. Fisher, Allen's Hill, N. Y.
296,333. Pipe Vise. Albert H. Jarecki, Erie, Pa.
296,334. Circular Sawing Machine. Joel H. Jones, Lynchburg, Va.
296,373. Corrugated Metal Rolling Shutter. James G. Wilson, New York, N. Y.
296,375. Tower. John S. Adams and Frederick U. Adams, Elgin, Ill.
296,402. Fastener for the Meeting-Rails of Sashes. William Gofo th, Windsor, Mo.
296,410. Sash-Weight. Charles Eberhard Heiss, Chicago, Ill.
296,419. Fireman's Tower. Eugene B. Magnus, South Norwalk, Conn.
296,430. Lock. Martin Luther Mikesell, Muscatine, Iowa.
296,458. Adjustable Cresting for Buildings. Timothy Rogers, Springfield, O.
296,469. Fastener for Doors, Windows, Gates, etc. Alexander G. Simpson, Arcadia, Mo.
296,482. Knob Attachment. Oscar Stoddard, Detroit, Mich.
296,507. Machine for Pressing Artificial Blocks or Bricks, etc. Albert Ball, Claremont, N. H.
296,526. Folding Staircase. Chas. H. Chase, New Orleans, La.
297,548. Air-Filter. Henry Flad, St. Louis, Mo.
296,582. Lift of Elevator. Earnest Krause, El Paso, Tex.
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296,616. Roofing Tile. Benjamin F. Powers, George E. Needham and Jas. Hayes, Cleveland, O.
296,622. Hand-Screw. Thomas Reno, Detroit, Mich.
296,629. Guiding and Supporting Device for Doors. Amos Sanders and Roger S. Henderson, Philadelphia, Pa.
296,634. Ventilating Apparatus. Joseph Sellwood and Simon James Harry, Ishpeming, Mich.
296,647. Imitation-Brick Weatherboarding for Frame Houses. Peter Toglio, Charleston, S. C.
296,658. Combined Anvil, Vise and Drill. Jas. Weathers, Indianapolis, Ind.
296,727. Pneumatic Door-Check. Walter C. Clark, Auburndale, Mass.
296,729. Electric Call-Bell. George P. Conant, Geneva Lake, Wis.
296,769. Fire-Escape Sling. Benedick Miller and George H. Hume, Paola, Kans.
296,785. Plane. Joseph B. Ripsom, Oshkosh, Wis.
296,791. Smoke-Consuming Device. John W. Smith and Jas. D. Smith, Washington, D. C.
296,792. Paint-Mixer. Roderick H. Smith, Chicago, Ill.
296,812. Electric Door-Bell Pull. Selwyn Nivison Blake, Elmira, N. Y.
296,813. Brick-Kiln Front on Furnace. Joseph Blum, Winnetka, Ill.
296,814. Brick-Drier. Joseph Blum, Winnetka, Ill.
296,822. Water-Closet. Patrick Connolly, Brooklyn, N. Y.
296,828. Pneumatic Bell-Ringing Apparatus. Robert P. Garsed, Norristown, Pa.
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296,850. Attachment for Anvils. Marvin A. Ladd, Springville, Mich.
296,873. Auger-Handle. David M. Parry, Rushville, Ind.
296,877. Wrench. Barney Ross, Sterling, O.
296,883. Safety-Attachment for Elevators. Rudolf Seiffert, Chicago, Ill.
296,926. Hot-Air Furnace. Perry B. Clark, Minneapolis, Minn.
296,933. Bench-Plane. Norman Edward Curtis, Mauston, Wis.
296,942. Wrench. James Du Shane, South Bend, Ind.
296,971. Block for Building Purposes. Thos. L. Jowett, Boston, Mass.
296,982. Wood-Screw. Jesse B. Low, New York, N. Y.
296,991. Screw. Alexander Mitchell, Fredericton, New Brunswick, Can.
296,997. Sash-Fastener. Arilla D. Ordway, Reed City, Mich.
297,005. Door-Check. Louis Rall, Gustav Rall and Edward Rall, Glasgow, Mo.
297,008. Show-Window Ventilator. Geo. W. Richwine, Muncie, Ind.
297,013. Tool for Boring Square Holes. Maier Rothschild, Shamokin, Pa.
297,032. Shutter-Worker. Leonard Tilton, Brooklyn, N. Y.
297,038. Skylight. Chas. A. Vaile, Baltimore, Md.
297,039. Air-Cooling Machine. William V. Wallace, Boston, Mass.
297,051. Brick Machine. William Andrus, Keokuk, Iowa.
297,056. Caliper Rule. Stephen H. Bellows, Athol, Mass.
297,074. Paint. Edmund H. Hague, Jackson, Mich.
297,093. Leveling Instrument. Levi C. Strong, Albany, N. Y.
297,096. Electric Doorkeeper. Albert C. Woehrle, New York, N. Y.
297,139. Liquid Paint. George T. Lewis, Phil delphia, Pa.
297,164. Surveyor's Level. Theodore F. Randolph, Cincinnati, O.
297,187. Sash-Holder. William O. Smith, Norwalk, O.
297,204. Blind-Slat Lock and Operator. Izaak Van Kersen, Kalamazoo, Mich.
297,209. Wrench. Thos. Foster White, Salem, Kans.
297,210. Ratchet-Drill. Pardon A. Whitney, Cleveland, O.
297,218. Brick Machine. William Andrus, Keokuk, Iowa.
297,227. Leveling and Plumbing Instrument. Oliver H. P. Brown, Clarksville, Ark.
297,228. Sash-Fastener. Francis M. Case, Denver, Colo.
297,239. Lock for Sliding-Doors. James Henry Dougherty, Whistler, Ala.
297,282. Carpenter's Vise. John F. Miller, Pittsburgh, Pa.
297,290. Coupling for Lightning-rod. Theodorus H. Patee, Greencastle, Ind.
297,310. Fan-Blower. James E. Studley, Oshkosh, Wis.
297,325. Steam-Radiator. Corydon Wheat, Geneva, N. Y.
297,331. Skeleton Tower. John S. Adams, Elgin, Ill.
297,332–338. Electric-Light Tower. John S. Adams, Elgin, Ill.
297,374. Roofing Compound. Jas. T. Fretwell, Atlanta, Ga.
297,392. Rotary Blower. Ralph E. Harris, Macomb, Ill.
297,395. Lumber-Trimming Machine. Edward Heyde, East Saginaw, Mich.
297,404. Sink or Analogous Article. Henry L. Jacobs, Columbus, O.
297,410. Excavating-Elevator. Geo. H. Kanmacher, Columbus, O.
297,423. Brick-Kiln. James S. Lester, Atlanta, Ga.
297,432. Automatic Fire-Extinguisher. Wm. Neracher, Cleveland, O.

Synopsis of Building News.

Aurora, Ill.—The local papers and the Rev. C. H. Holbrook are agitating the subject of a hospital for the city. Within a few weeks it has been necessary to perform amputations on strangers injured on the railroads, and there was no place for the operation but the city calaboose. A general hospital is absolutely needed, and will probably shortly be built.

Bloomington, Ind.—As spring advances, the prospects brighten. There is over $100,000 worth of building under contract already. Forty stonemasons at work on the Indiana University struck for $3 per day, and work is temporarily suspended, but will start again as soon as new men arrive.

Architect J. L. N. Nichols: For L. D. Rogers, one-story frame, 40 by 45 feet, to cost $1,400; projected. For W. Baily, one-story frame, 32 by 38 feet, to cost $800. For M. Beatty, one-story frame, 40 by 43 feet, to cost $1,400. For W. Stuart, two frame residences, two stories each, to cost $2,000; size, 30 by 48 feet. For Ben. Rogers, one two-story frame residence, 30 by 50 feet, to cost $1,000. For W. Hubbard, one frame residence, one-story, 28 by 40 feet, to cost $900.

Chicago—The building season is proving better than even builders hoped for, and the work both large and small that has been projected has either commenced or is about to be. The brickyards are all hard at work, and there will be plenty of the new crop within ten days at $7.50 a thousand.

There is now a prospect of all the buildings reported upon during the past few months being immediately commenced. The fate of the light stone-venecred three and four story structures erected immediately after the fire is shadowed by that of those torn down to make way for larger structures. The three-story "Exchange" building is being removed to make way for the opera house, which will be immediately commenced by architects Cobb & Frost; a four-story building is demolished for the Home Insurance building; the notorious "Tivoli" building will give way to the J. Q. Adams ten-story office building; a block of four-story stone fronts opposite the Grand Pacific Hotel, on La Salle street between Jackson and Quincy streets, are being vacated and demolished, a part of the ground to be immediately occupied by the Mallers ten-story office structure, while the vacant lots are being cleared of rubbish for excavation.

"This vicinity," said a gentleman whose name is connected with one of the finest of our office buildings, looking from the La Salle street windows of the Grand Pacific, "is destined to exhibit the most remarkable collection of structures of any place in the world," and when this is looked into the gentleman's sagacity will be appreciated. Those buildings, which are in the stages between the letting of contracts and completion are the Marshall Field, S. S. Beman, architect; the Home Insurance, W. L. B. Jenney, architect; the Loomis, Burnham & Root, architects; the Mallers, J. J. Flanders, architect; the Counselman, Burnham & Root, architects; the A. J. Parker, J. M. Van Osdel, architect; the Royal Insurance, W. W. Boyington, architect; the Open Board of Trade, Wheelock & Clay, architects, all office buildings of ten stories or over, and McCoy's eight-story hotel, Greg Vigeant, architect, and the new Board of Trade building, W. W. Boyington; while though no contracts have been let, the plans are fully prepared for the Armour, Kent & Bensley office building, of which Burnham & Root are the architects. The plans for the Gaff building have been prepared by Architect S. V. Shipman, and the row of four-story stone front buildings on La Salle street, between the site for the Maller's building and Counselman's building have been vocated and will be torn down to make room for it. It will be about 71 by 60 feet, ten stories high. These buildings are all on the line of La Salle street between Monroe and Van Buren streets, or surrounding the Board of Trade building. A magnificent spectacle of building activity it surely is.

The street question is at present agitating the public mind, and when the future is looked into the prospect for the next ten years is not encouraging. The old gas company's mains were large enough till after the new company had finished tearing up the streets to lay their mains, and now they are laying enlarged mains. Then each new telegraph or telephone company that starts must put their wires underground, and this is being done by a telegraph company at the present time. Besides these prospective street-destroying elements, the telegraph and telephone companies can lay no new wires, and they, too, will be obliged, as they should, in the near future, to place their wires out of sight; and as these matters are now conducted each company follows its own sweet will and breaks ground whenever they are ready, so that streets are torn up for months at a time, permits being granted by the city council without regard to the time or the inconvenience to the public. This will continue till so many gaspipes, water-pipes, telegraph cable tubes, etc., are laid that they encroach upon each other, and then will have to be done what should have been done long ago. A tunnel will have to be constructed to include them all, so large that all repairs and additions can be made without disturbing the street pavement. After the city has paid thousands of dollars for stone pavements, and thousands more to repair them where they have been torn up and insecurely laid, it will wake up to the fact that all this could have been saved by prompt action before the evil had gone beyond remedy.

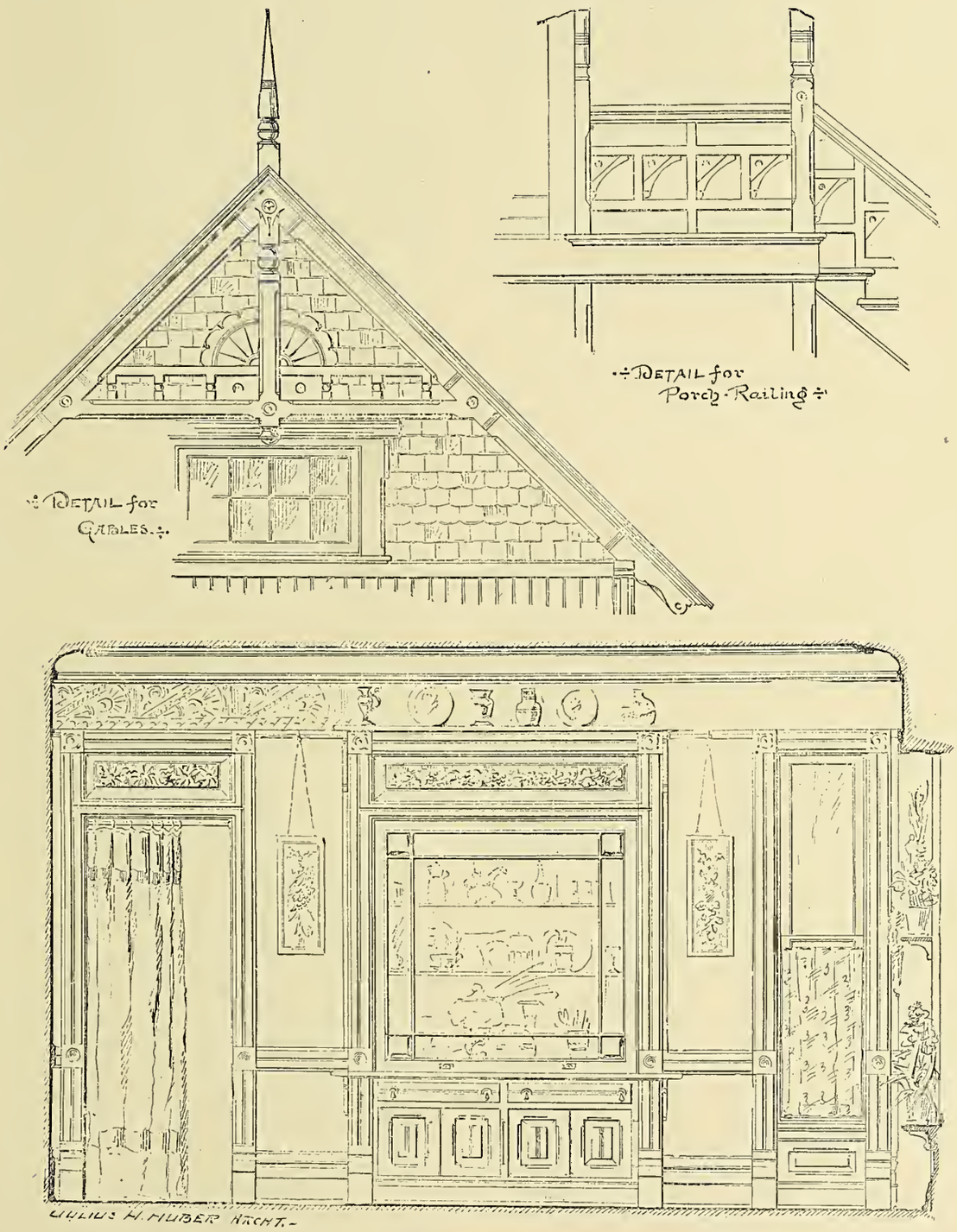
The prices of building material and labor make the cost of building about that of last year, perhaps a trifle lower, but not as much as ten per cent, as it has been estimated. Pressed brick of a fine quality is sent to compete for favor with those already well known from Harris Bros. of Zanesville, from Chester, Ill., and Cincinnati, O. They are each good in color and texture, and as architects are becoming very critical, as a rule have no preferences aside from those their judgment of material commends, each make of brick will be used according to its merits.

There has been less talk of strikes among workmen this spring than ever before. The severe lesson taught the bricklayers last season has been of value to them as well as to other trades, and work is so plenty at good wages there seems to be little likelihood of any difficulty in this direction this year; and should a strike occur, the momentum already gained by the building interest can hardly be now affected.

The building now being erected corner Blue Island avenue and Fifteenth street, for S. W. Rawson, president of Union Trust Company, will contain 25,000 of Hinchliff & Owen's Indiana pressed brick. Robert Tobin, builder. This firm also supply 25,000 pressed brick for a residence for J. H. Pearson, the prominent lumberman, on West Adams street. Burnham & Root are the architects. The trimming is to be of stone, and also several thousand ornamental brick, made by Hinchliff & Owen from special designs, will be used.

Architect S. S. Beman is preparing plans for a residence for Mr. Morrison, of Morrison & Plumber, on Michigan avenue. The walls will be of Anderson pressed brick, cost $12,000. Also plans for residence for Wm. H. Murray, on Prairie avenue, south of Marshall Field's residence. Walls of Bellville stone and Baltimore brick. Also plans for residence for J. Van Inwagen. The first story will be of stone, with pressed brick above.

Architect Louis Rodatz, for Johnathan Clark, Seventeenth and State streets, two stores, 44 by 60 feet, three stories; also for same party, a store building on State and Harrison streets, 60 by 138 feet, three stories, pressed brick front; also two houses for J. E. Henneberry, on Loomis, near Polk street, 22 by 54 feet, two-story and basement.



DETAILS OF SUBURBAN COTTAGE.—Julius H. Huber, Architect, Chicago.

The plans are being prepared, and Milwaukee pressed brick will be used. Also three stone-front houses, two-story and basement, for Mike Clarkson, on Indiana avenue and Thirty-first street.

Architects Burling & Whitehouse are constructing for George Bullen, Esq., a malt-house, and also a dry-kiln. The kiln is on Michigan street, near St. Clair. It is 50 by 100 feet and 90 feet high. It will be thoroughly fire-proof, and will contain four of Tespfer's patent malt-dumping floors. This building will contain all the improvements now known for the drying of malt, and appointed in every respect in a first-class manner. The cost complete will be about $37,000. The malthouse will be built adjoining the grain warehouse, corner Illinois and St. Clair streets. It will be 100 by 100 feet, seven stories in height, substantially built of brick, and will cost $35,000.

Architect W. L. B. Jenney is preparing plans for a house for P. B. Woolford, on Dearborn street, south of Harrison, to cost $7,000. It will be two-stories and basement, and built of Cincinnati pressed brick and cut stone.

Architect L. G. Halberg is building, on La Salle avenue near Eugene street, two houses for himself. They will be 40 by 65 feet, two stories, attic and basement; foundations are in and contracts let; cost about $15,000. For Mr. A. R. Pool, a residence at No. 49 Indiana street, 40 by 15 feet, three stories and basement, Indiana pressed brick front; cost about $5,000. For Mr. C. W. Blaisdell, residence on La Salle near Schiller street, 60 by 25 feet, stone front, three stories and basement, ready for contracts May 5; cost about $7,000. For George C. Hutchinson, residence 38 by 60 feet, on Ashland avenue south of Harrison street, two-story basement and attic, Indiana and Anderson pressed brick; cost about $12,000. For Mr. Edward B. Esher, two-story and basement residence, 25 by 55 feet, on Winchester avenue near Van Buren street, rock-faced stone basement, St. Louis pressed-brick front, ornamented with courses of moulded brick; cost about $12,000.

Architect George H. Edbrooke is pushing the work upon a fine hospital and asylum building at Geneva Lake, Wis. It will be four stories in height. Anderson pressed brick is the material that will be used in its construction. It will be finished in hard-wood, have a high-pitched roof, with dormers, and approach the Queen Anne style of architecture. The cost, when completed, is estimated at $150,000. The building is being put up by the Wisconsin Association for the Private Cure of the Insane.

Architects J. T. Moulton & Son are constructing for Richards, Maywood & Co., at Englewood, Ill., a transfer elevator that is a thorough departure from the prevailing type. It is 30 by 200, and so arranged that, instead of elevating the grain, the cars (on a double track) are run upon an incline of 3 feet to 100 feet, a height of about 35 feet. The grain to be transferred is shot down to a scale placed midway below and weighed, and then continues its way into the car below. The house holds five cars on each track, and the double track allows the changing of cars above and below without delay. The capacity of the elevator will be doubled as soon as the business will demand it, and it is certain that the style of this convenient elevator will be largely copied.

Architects Treat & Foltz report the following buildings planned, under way and approaching completion: Residence for C. B. Farwell on Pearson street, pressed brick and brownstone work, three stories and basement; estimated cost, $100,000. A three-story and basement house for W. H. White, on Superior street, near the lake, to be constructed of pressed brick, at a cost of $10,000. A house for W. H. Burnet, at Kenwood, of pressed brick and timberwork, to cost $28,000. A residence for Dr. J. P. Miller, No. 903 West Monroe street; cost $10,000. A three-story and basement residence for J. S. Norton, at the corner of Division and Stone streets; the basement to be of artesian-well stone; above the basement of pressed brick, with brownstone trimmings; to cost $16,000. A three-story and basement factory building on South Jefferson street, for M. Benner, to cost $20,000. A factory building for E. Schneider & Co., at the corner of Twenty-fourth place and Wallace street; cost $25,000. A three-story and basement residence for R. A. Misewinkle, at Lake View, to cost $12,000. A frame residence for Mr. Pincoffs, at Kenwood; cost $4,000. They are completing the four buildings for St. Luke's hospital, on Indiana avenue, the estimated cost of which is $130,000. An additional story is being placed on the residence of C. R. Cummings, No. 1641 Indiana avenue, and a stable in the rear of the same, the cost of which will be $15,000. A three-story and basement residence for Rev. H. Johnson, on Halsted street, near Lincoln avenue, to cost $15,000. A pressed-brick and brownstone residence for James A. Hunt, on Delaware place, three stories and basement; cost $18,000. Two apartment houses on State street, near Twenty-third, with stone fronts, for E. J. Lehmann, to cost $10,000. At No. 344 State street, a four-story building, 25 by 90 feet, of pressed brick, with terra cotta trimmings, to cost $16,000. Finishing two residences on Elm street, near State, for the estate of H. P. Hubbard, to cost $15,000, and starting work on two residences adjoining, for the same parties, to cost $16,500. They are about completing the residence of James H. Swan, No. 2623 Michigan avenue, at a cost of $35,000, and a stable for the same to cost $8,000. They have commenced work on the two buildings for the Episcopal Theological Seminary on Washington boulevard, near California avenue, which are to cost $75,000. A block of six stores on West Van Buren street, near Aberdeen, three stories and basement, with flats above, to cost $45,000.

Architect C. L Stiles reports that the New High School at Elgin, which was illustrated in this paper some time back, is now complete and ready for occupancy. The building is about 100 by 100, two-story, and has a tower on the southwest corner, 85 feet high; building contains ten rooms, calculated to accommodate 550 scholars. Four main entrances on first floor, with stone steps and trimmings, also two rear entrances; the second floor is furnished with two exits on the outside, scholars being enabled to reach the ground by means of iron stairways, these to be used in case of fire or accident. A large room in front part of second story contains two windows eight feet in width, the upper part of which is of handsome patterns of stained glass; this not only softens the light, but adds greatly to the appearance of the front. The building is of white brick, and trimmed with buff Bedford stone, is complete with all modern improvements, and cost $32,000. Mr. Stiles has also on hand the following work: Two very neat residences, 24 by 50, two-story and cellar, being erected on Leiter's Addition to La Grange; they are Queen Anne in style; cost, each, $4,000. A residence for Mr. Shannon, at Hinsdale, just commenced; to cost $3,000. A two-story and basement tenement house, 23 by 46, for Mr. E. Todd, on Park avenue, built of St. Louis pressed brick, with brownstone trimmings, to cost $7,500. For Mrs. M. J. Ginty, at Oak Park, two-story cottage, 22 by 44, cost $3,000. Preparing plans for a brick school-building, at Stanton, Iowa, 45 by 52, two-story, four rooms, cost $8,000. For Mrs. Carpenter, at Carpentersville, Ill., a very unique Congregational church, 36 feet square, with 20 feet Octagon bays on each side; style Gothic, to be of brick, with limestone trimmings, open trusswork roof; seating capacity 200 persons; cost $9,000. At La Grange, a Social Hall building, 40 by 128, main hall 40 by 60, dining-room 24 by 31, raised stage 20 by 40; besides dressing-rooms, office, etc.; building is to be used for social entertainments, dances, parties, etc. For Mr. F. B. Leavitt, at Englewood, plans just completed for neat little cottage, 24 by 48, one and one-half story, to cost about $3,500.

Architect W. L. Carroll has prepared plans for a block of six flats, three stories and basement, 50 feet front by 69 feet deep, for W. E. Hall, to be erected on Aberdeen street, near Jackson. It will be of pressed brick, with an ornamental front, and each flat will contain eight rooms, and a furnace in the basement for each flat. In the center will be a passway through the building to the rear from the sidewalk, and a court between the flats on either side for light and ventilation, with an open court on each side in the party wall. Barns will be erected in the rear. The total cost will be about $15,000.

Architect J. J. Flanders has prepared plans for two ten-room houses for J. K. Barry, to be erected on Washington boulevard, at a cost of $20,000. The styles of Francis I and the Elizabethan are made use of, the materials being Indiana pressed brick and terra cotta, artistically disposed, with light wood verandahs of carved and turned work. Also plans for the erection of the Emerson school, on Paulina and Walnut streets, and the Jefferson school, on Laflin and Nebraska streets. Indiana pressed brick is the material used.

Architect Bemy is preparing plans for the improvement of property near Lincoln park, bounded by Clark street, Webster avenue and Sedgwick street, by the erection of a block of stores and flats for R. Robertson, of Joliet. The buildings are to be faced with Indiana pressed brick, furnished by Hinchliff & Owen, Adam Warner is the contractor.

Architect F. B. Townsend is taking bids on residence, 30 by 72 feet, for W. H. Russell, Calumet avenue, south of Thirty-first street. Baltimore pressed brick and terra-cotta trimmings; two-story; cost about $15,000.

Architect A. M. Colton is erecting a Presbyterian Seminary on Belden avenue, corner of Halsted street. It will be 130 by 140 feet, four stories and basement in height. The walls will be of Indiana pressed brick, with stone trimmings. The structure will be fireproofed, with brick and hollow tile partitions. It will contain fifty-two rooms. The basement will contain the steam-heating apparatus, janitor's room, bathrooms, etc. The first floor will include a parlor, 19 by 42 feet, with bay window 7 by 13 feet. The remainder of the floors will be laid out in students' rooms, each student being allotted a bedroom and sitting-room; the contracts are all let; the cost will be about $60,000. For W. C. Comstock, alterations on four four-story and basement flats on Wabash avenue, at an expense of $20,000. Also barn on corner Adams and Canal, for Gurney Cab Company, 80 by 194, three stories high. The first story will be used for the cab service, with stabling for 174 horses, and sixty-two rooms above for a hotel; cost $20,000. Also store building for C. H. McCormick, to be occupied by the hardware firm of J. F. Wollensak. It will be 40 by 90, five-stories in height, walls of Indiana pressed brick; cost $16,000; contracts let.

Cincinnati, O.—The prospects are most favorable, and the prospects are that a large amount of building will be done this season.

Architect Geo. W. Rapp: Order of Cincinnatus, frame building, 90 by 150 feet, the entire structure covered with corrugated iron, to cost $5,500; under way. Remodeling house for Edward Stevens, to cost $8,798; under way.

Architect James McLaughlin has received from the Courthouse Building Commission the contract for making plans and specifications for repairing the burned structure.

It is reported that Mr. Emery is putting up twenty-seven buildings in Chicago.

Architect McLaughlin believes that with a continuation of good weather and no unforeseen delays, the Cincinnati Art Museum will be under roof by the close of the building season.

Architect Des Jardins has completed plans for Dr. H. A. Smith, for a four-story stone-front pressed-brick freestone-trimmed house, to be erected on West Eighth street. Estimated cost about $10,000.

Architect Hannaford has in his office the plans for Walter Fields' Avondale residence. The dwelling with its large entrance and hall will be broken in outline and have a picturesque effect. The seven-story Derby building, 50 by 100 feet, on the southeast corner of Fourth and Elm, is also in Mr. Hannaford's care.

Architect Anderson has just finished a design for a fourteen-room dwelling to be built on McMillan, near Summit, by John W. Fisher. Also, plans for a pressed-brick dwelling for Julius Moster, who will build on Seventh, near Baymiller. The execution of plans for remodeling a Methodist church in Vicksburg is in his hands.

Architect Buddemeyer has drawn plans for a five-story brick, stone and terra-cotta building to front 49 feet on Sycamore and extend through to Hammond street. The improvement is to be on the Armstrong estate, and will cost $40,000. A handsome square tower on the south front corner will add finish to the structure.

Architect Crapsey has been engaged in preparing plans for F. & L. Khan & Bros.' stove foundry, to be built in Hamilton, Ohio. The buildings, three in number, will cover 65,000 square feet, and will require an outlay of about $30,000. Some of Maysville's (Ky.) good people want a $12,000 Presbyterian church. Messrs. Crapsey and R. W. Brown are preparing the plans.

The following are the more important building permits recently issued: M. Clements, two-story brick, south side Hathaway, near Baymiller; $5,000. L. B. Harrison, five-story brick, west side Race, between Fourth and Fifth; $5,000. J. D. Rumuir, three-story brick, north side Clifton avenue, near Ohio avenue; $6,300. J. Schelenburger, two-and-a-half-story brick, east side Vine, near Boone; $6,000. Mrs. Lahman, two-and-a-half-story brick, west side Linn, near Liberty; $6,000. A. Lipa, three-story brick, No. 202 Western avenue; $4,700. Mrs. R. Beeman, three-story brick, north side Mulberry, east of Incline; $5,000. Mrs. J. Woods, addition three-story brick, No. 121 Longworth street; $2,000. J. Boem, two-and-a-half-story brick, south side Calhoun, near Vine; $6,000. J. B. Lucas, two-story brick, east side Wheeler, near Warner; $4,000. W. Harrison, two-story brick, southeast corner of Highland avenue and Oak street; $7,000. D. Conn, two-story brick addition, No. 265 Clinton street; $2,200. Wm. Hackman, two-story brick, northeast corner Cutter and Everett; $3,000. P. Lane, three-story brick, north side Warner, west of ravine; $4,100. T. Soelter, three-story brick, southeast corner of Euclid avenue and Molitor street; $5,000. J. Farrell, two-story frame, Third and Collard; $2,500. John Ridder, three-story brick, Lickrun pike, near South Branch road; $3,000. Ed. Stevens, repair two-story brick, Crown, opposite Home; $8,500. Dr. Rendigs, four-and-one-half-story brick, northeast corner Woodward and Pendleton; $12,000. P. Hickey, three-story brick, No. 94 Clark; $5,000. Dr. J. D. Taylor, repair three-story brick, northeast corner Seventh and Elm; $7,500. F. Lambert, two-and-one-half-story brick, No. 29 Franklin; $210. Mr. Johnston, two-story frame, Park avenue, near Lincoln avenue; $2,000. C. T. Dickson, three-story brick, east side of Gilbert avenue, north of Morris; $2,500. J. Kauffman Brewing Company, one-story brick, No. 2 Hamis street; $2,000. F. Schell, three-story brick, southeast corner of Price and State avenue; $5,000. F. H. Bastian, three-and-one-half-story brick, south side Eighth, near Carr; $6,200. H. Frey, two-story brick, south side Harrison, near Broadway; $5,400. F. Sharra, four-story brick, No. 569 Walnut street; $6,322. K. K. Church, two-story stone front, northeast corner Richmond and Mound; $15,000. F. Montel, addition to three-story brick, No. 46 Bank street, $2,500. W. Peckes, two-story brick No. 130 East, Second street; $2,500. F. L. Funke, three-story brick, northwest corner of Exter and Western avenue; $6,000. H. Lakekamp, two story brick, east side of Hackberry, near Madison pike; $3,000. P. D. Roe, two-and-one-half-story brick, south side of Dorsey, west of Sycamore; $4,000. Mary Walters, two-story frame, north side of Church, near Gilbert avenue; $3,000. James McBrain, two-story brick, 15 Sloo street; $2,200. F. M. Zumstein, three-story frame, west side Lodge alley, near Sixth street; $3,800. Mt. Auburn Baptist church, west side Auburn avenue, near Church, two-story stone; $21,000. F. Burdick, four-story brick, northeast corner Twelfth and Bremen; $7,000. Mr. Bennett, one-story brick, south side Stable, near schoolhouse; $1,500. L. Denning, two-and-one-half-story brick, Addison street, near Spring Grove avenue; $3,500.

Charleston, W. Va.—On the 17th ult. the State Board of Public Works met in this city to take action on the completion of the State capitol, which Contractor Shephard threw up recently, owing to inability to complete for his contract bid—$150,000. The board ordered Architect Kemble to make out specifications of the different kinds of work, and estimate the cost for completion of the building, which is to be ready for State uses a year from next May. The architect will report as soon as possible, so that the board can advertise for bids for completion of the building.

Cleveland, O.—The new west high school building has just been finished and opened. The edifice is two stories, and is built of brick and stone. It has a frontage of 204 feet on Bridge street, and from all sides presents an imposing appearance. It contains sixteen class-rooms, each 28 by 36 feet, and fifteen feet high. Eight of the rooms are on the first floor, and six of the class-rooms and the assembly-room are on the second floor. The class-rooms will contain fifty-six desks each, and the assembly-room has a seating capacity of six hundred. The cost of the building complete is $20,000. The principal features of the new building are its ventilating, heating and lighting facilities. One side of each class-room is composed almost entirely of windows extending from floor to ceiling. The desks will be so arranged that the light will come from the left side of the pupils. Set in niches in the walls, opposite the windows, are steam radiators. The ventilation is so arranged that a current of warm air flows across the ceiling from the radiators, drops down to the floor, under the cooling influence of the opposite wall, flows across the floor to the grating under the radiators, and escapes through the ventilating towers, which are heated by steam pipes. By experiment this system has been found to produce a nearly equal temperature in all parts of the room, and afford ample ventilation. The halls are broad and long, and the stairways fully up to the demands of a school.

Columbus, O.—The papers have been objecting to the sum paid by the commissioners for architect's services for plans and superintendence upon the new infirmary building, and hint that "if the architect's fees on the new courthouse are to be fixed according to the rule which seems to have prevailed in building the county infirmary, a nice sum is waiting for somebody." It is gratifying to know that architects are, in a few cases at least, getting paid for preparing plans for public work, and in this case there is little doubt but that architect George H. Meatzel, who is said to have received $6,168.71 for this work, was not overpaid, or his predecessor, Mr. Kramer, who received $650. If they are equally judicious in selecting an architect for the proposed courthouse, which is to cost $500,000, and paying him for his work, they will not only act honorably, but secure for their city an architectural ornament and creditable building. The following important building permits are issued: Adolph Theobald, two-story brick dwelling, 40 by 40 feet, on High street, to cost $4,000; Henry Hackbarth, two-story brick storeroom, 42 by 31 feet, on Fulton street, to cost $2,200; John E. Jeffords, five-story brick storeroom and hotel on High street, to cost $30,000; Columbus Brass and Steam Pipe Works Company, two-story brick and iron shop, 129 by 31 feet, on High street, to cost $2,000; Eugene Mauch, two-story brick dwelling, 49 by 29 feet, on Dennison avenue, to cost $2,000; Charles Schwenker, four-story brick storeroom, 95 by 75 feet, on East Spring street, to cost $10,000; L. Backus, two-story brick addition, 94 by 16 feet to storeroom on High street, to cost $2,200; L. M. Baker, two-story brick addition to storeroom on South High street, to cost $3,000. The Broad street bridge, government building, courthouse, new railroads, and many other improvements, indicate a hearty growth in the capital city. The building this year is not in one direction, but in all parts of the city. The census of 1890 will show 100,000 in Columbus.

Detroit, Mich.—The architects are very busy—"too busy to talk," they say. Most of their work is in a chrysalis state. Plans and estimates are being made, and contracts let as fast as possible, and the architects are all well employed. The *Post and Tribune*, in speaking of the Architects' Association, has this to say: The association is working on steadily to a satisfactory basis. One object is to infuse an *esprit de corps*

into the ranks of the profession, so that soliciting and other unprofessional conduct will be discouraged and finally discontinued. The great grievance of which they complain is the lack of a law compelling the people practicing the profession to pass a prescribed series of examinations, and to secure this law the association intends to employ its best efforts. It is not intended to make anything like a scale of rates, but with a certain standard of competency it is claimed that the members of the profession themselves will be secured from unjust competition, and the public generally from fraud. Meetings of the association are held on the first Monday of each month, and an effort is now being made to secure extended quarters in which models, plans, drawings, etc., may be stored, and studied by the members. It is not proposed to limit the membership to architects. Draughtsmen, builders and contractors will be eligible, and it is thought by this extension a powerful body with common interests to preserve will be got together.

The following are the more important building permits issued recently:

John Finn, two-story brick dwelling at 80 Garfield street, $5,000; Edward Cowhey, three cottages at 168, 170 and 172 Fourth avenue, $2,100; Thomas Church & Co., four-story brick store on Bates street, $4,000; Kishner & Co., two frame cottages at 896 and 898 Sixteenth street, $2,000; John B. Wagner, two-story brick dwelling at 175 Lincoln avenue, $4,000; Thomas Payne, two-story frame dwelling on Warren avenue, $3,000; Topping and Fisher, two two-story brick stores at 363 and 365 Woodward avenue, $5,500; Joseph Henke, two-story brick store at 165 Hastings street, $4,500; C. L. Cole, two-story brick dwelling at 50 Alexandrine avenue, $6,000; Joseph Henke, brick store, No. 195 Hastings street, $4,500; C. L. Cobb, brick dwelling, No. 50 Alexandrine avenue, $6,000; Morris & Knapp, frame dwelling, No. 673 Fourth avenue, $2,000; Rebecca Bates, three brick stores, Nos. 339 and 341 Woodward avenue, $7,000; S. Granger, double frame dwelling, Nos. 179 and 181 Mt. Elliott avenue, $3,000; W. H. Allison, brick dwelling, No. 104 Canfield avenue, $9,000; A. Detroyer, brick store, No. 811 Gratiot avenue, $4,000; E. D. Phillips, brick dwelling, No. 95 Miami avenue, $5,250; E. Nuppenau, repairs to brick office, Nos. 51 and 53 West Larned street, $4,600.

Des Moines, Ia.—Bricklaying on the fifth story of the Kirkwood House is being pushed rapidly, and it will be but a short time before it will be completed and a roof put on.

Evanston, Ill.—The building season is opening up with a boom. The prospects of a new road are leading people to buy and build at a rate which probably surpasses any future time. President Cummings, of the Northwestern University, expects to build this season on Chicago avenue, near the university. George C. Wilcox has commenced a $7,000 addition to his home on Grove street. Foundations are in for Mr. Bass' dwelling on Grove street, near Oak avenue. E. A. Kimball, John B. Kirk and Daniel J. Avery have bought lots on Ridge avenue and will build. B. C. Cole has bought a lot on Greenwood street, 70 by 214 feet, of J. P. Boutelle for $3,500, and will build at once. The Avenue House addition, which will almost double its capacity, is inclosed. S. S. Neal is erecting a cottage on Benson avenue, S. E. Bradley one on Chicago avenue, near Dempster street, and C. S. Holbrook has contracted for two on Foster street. The Presbyterian Society of South Evanston, recently organized, has bought the northeast corner of Hinman and Lincoln avenues, with a frontage of 114 feet, an average breadth of 125 feet, and depth of 190 feet. They are maturing plans for a handsome edifice. Messrs. L. C. Pitner & Son are contemplating the erection of a large number of houses at Ravenswood and other points under the superintendence of a prominent contractor of Evanston.

Evansville, Ind.—Reid Bros. are building a schoolhouse, two-story and basement in height, stone, brick and Chicago terra cotta; will seat six hundred; cost about $30,000. Also a residence for Jacob Eicle; cost $10,000. Also in Henderson, residence for Capt. Perkins; cost $8,000. Also in Princeton, two residences, to cost $4,000 each.

Geneva, Ill.—The board of supervisors of Kane county met on Wednesday for the special consideration of courthouse improvements. Repairs on the building are necessary "to prevent some humane society from interfering with the county officials for immuring their employés and violators of the law within the walls of the building." The needs of the case were looked into, and it was decided to expend about $8,000 in heating the building by steam and in thoroughly ventilating it. The much-needed work will be commenced forthwith.

Lincoln, Neb.—Weather backward, and building operations are delayed, but the outlook was never better for the season.

Architect Artemas Roberts: For B. Lombard, Jr., three-story brick, 25 by 100 feet, to cost $12,000; nearly complete. For P. S. Stewart, three-story brick, 25 by 90 feet, to cost $5,000; inclosed. For Mrs. M. J. Bond, three-story brick, 25 by 90 feet, to cost $5,000; inclosed. For J. W. Winzer, three-story brick, 25 by 100 feet, to cost $7,000; projected. For Hass & Zeb, three-story brick, 25 by 50 feet, to cost $4,000. For Mr. Alexander, three-story brick, 22 by 50 feet, to cost $3,500; projected. For E. E. Brown, two-story brick dwelling, 43 by 56 feet, to cost $12,000; projected.

Mankato, Minn.—The number of brick and wood residences under process of construction is beyond computation in a single day's work, but can be said to be the largest ever made in one day in the city. No place in Minnesota has ever had fairer prospects than Mankato is enjoying at present, and the best of it all is, she has real solid backing. None of it is fictitious, but a genuine, warranted growth, and its limit is beyond computation.

The large double store, 50 by 100 feet, two-stories brick, and stone basement, adjoining city hall on Front street, being built by John F. Meaghan, is ready for the superstructure. This is to be the best built block in Mankato, and is hard to beat anywhere. The foundation is extremely well made, and the basement walls are of an extra thickness. Add to this the fact that its rear door is less than 100 feet from the side-tracks of the Chicago, Milwaukee and St. Paul railroad, and the adaptability of this block for wholesale purposes is most apparent. This block is to be completed by July 1, and will cost $15,000. It is to have a front of St. Louis pressed brick and French plate glass, and is available for any first-class house who desires to establish a wholesale business in a city which possesses the best advantages for business of any point in the United States.

The new building of Wagen Bros., 24 by 80 feet, has been begun, the excavation having been completed and material on the ground. It is to be completed in July, and will cost $2,500. It is to be two stories of brick, and stone basement, and will be occupied as a butcher-shop on the first floor, and residence on the second floor, by themselves.

On the corner of Front and Cherry streets, J. A. Lewis is erecting a brick two-story block with stone basement, 22 by 83 feet, the foundation walls of which are well under way. It is to be completed June 1, and is for rent. The lower floor will make one of the finest locations in Mankato for business purposes. The second floor will be divided into suites of apartments for offices or residences. The location of this block will secure its immediate rental. It will cost, completed, $4,000.

In block 13, the First National Bank have begun the erection of the second section of their block, which is to be 22 by 80 feet, two stories and basement. The first floor is to be a storeroom, not rented as yet, while the second floor is to be apartments or offices generally rented now by the Standard Cement Company and others. The excavation is about completed, and the building will be ready for use about July 1, costing about $2,840.

Milwaukee, Wis.—The Commissioners of Public Works have issued permits to occupy streets in the erection of the following buildings: A dwelling costing $3,000, for F. Hallman, on Fifth street; a stone basement, costing $3,500, for Cook & Hyde, on Eighth street; a brick building, costing $2,500, for Frank Baltes, on Chestnut street; a frame building, for C. Viermont, costing $3,500; three frame buildings, costing $5,000, for Mrs. Newton, on Cedar street; a store costing $3,650, for C. Rostads, on Railroad street; three dwellings, costing $6,700, for Geo. Parker, on Florida street.

All Saints' cathedral is undergoing a remodeling so far as the chancel. The latter is being built up and out into the nave, which is expected, when completed, to add much to the effectiveness and comfort of choir and clergy. The former will be raised about one foot above the floor level, while the cathedral clergy will occupy seats on another platform about twice the height of the first from the floor. The interior of the cathedral will at the same time undergo a new frescoing. These repairs and changes will not be completed for about two weeks.

Work on the new Colby block, at the northeast corner of Milwaukee and Mason streets, has been begun, and it is hoped to have the structure ready for occupancy by September, this year. The building will have a frontage of 120 feet on Mason street, and 100 on Milwaukee street, and will be five stories in height. The foundations will be of stone and the superstructure of brick, with Bass Island stone trimmings. The ground floor will be laid out in five stores, while the upper floors will be devoted to offices. The second and third floors will be occupied by the Wisconsin Central Railway Company. The cost is estimated at from $150,000 to $200,000.

Minneapolis, Minn.—A building, 78 by 51 feet, divided in the center hy a fire wall, came crashing down during the latter part of the past month, injuring two persons seriously. The wooden building which originally occupied the site burned last November, and it was determined to rebuild it at once of brick. Trenches were dug ten feet deep for the foundation walls, which were laid twenty-two inches thick, in the dead of winter, and this is supposed to be the cause of the fall—that the mortar in the foundations, and possibly in the walls, froze before drying, and, when spring came, weakened by thawing. The foundation for the dividing wall is thirty inches wide at the bottom, and twenty-one inches at the top. The walls were also put up during the winter, and to show how unsatisfactory this sort of work was, an examination of detached brick showed that the mortar, still moist, could be rubbed off with the thumb and fingers. The outside walls were sixteen inches thick, and the fire wall twelve inches up to the second floor, and above that eight inches thick. The walls, roof and flooring were completed, and it was intended to finish the building, ready for occupancy, in three weeks. It was to cost $80,000. Some time ago it was noticed by the position of the floor beams that the building was settling in the center, and the workmen were preparing to brace up the walls on the inside. They had left the building but a few minutes before it fell.

The interior of the West hotel has been plastered and finished down to the second story, and Architect Buffington adheres to his promise that the building shall be ready for the formal opening by the first day of July.

Work has been commenced on George Brackett's new block at the corner of First avenue south and Second street. J. C. Berry and Frank Berry break gravel to-day for the erection of three brick stores near the corner of Central avenue and Fifth street, east division, to cost $12,000 to $15,000. Mrs. M. Whitaker of Mankato is preparing to build a brick block, 44 by 65, and two stories high, with basement, on Third street, between Sixth and Seventh avenues south. The buildings have been removed from the site. The buildings are being removed from the corner of Third street and First avenue north in anticipation of the erection of a substantial brick block on that important corner. Mr. F. B. Long's new block on the corner of Fifth street and Hennepin avenue will be known as the Kasota building, and will be built of Kasota stone. D. B. Searles is to build an $8,000 residence on the corner of Lyndale and Hawthorn avenues. Fully $8,000 is being expended in remodeling the Theatre Comique building on First avenue south. John T. Lucas has purchased one half of the old Masonic block at 109 Nicollet avenue for $25,500. The property belonged to the Hedderly estate. F. D. Nordenburg is to build an addition to his brewery buildings 50 by 100 feet and seven stories high, on the bluff where his present brewery is located. The structure will be of stone, and it is estimated that fully $60,000 will be expended on the building and its stationary machinery.

The Minneapolis end of the *Pioneer Press* of the 27th ult. reports the following: Ground was broken during the past week by C. E. Gates for a block of fifteen houses, to he located on the corner of Three-and-a-half avenue south and Seventeenth street. The buildings will be two stories high above the basement, and the corner houses three stories high. Mr. Kimball's plans show an exceedingly attractive superstructure. The houses will be built with red pressed brick front, with cut stone trimmings, and with furnaces, gas, hot and cold water and all the modern conveniences. The houses will cost about $4,000 each, and the improvement will represent an expenditure of $60,000. E. Baker is building a block of two stores, on the corner of Fourth avenue and Ninth street, to cost about $5,000. Mr. William Searles has had the plans drawn for a very handsome $10,000 residence he proposes to build on the corner of Hawthorne and Lyndale avenues the present season. J. S. Bradstreet has commenced work on a house on Second avenue south and Twenty-second street, to cost $10,000. Plant & Whitney are the architects, but Mr. Bradstreet will probably contribute largely to its features. Its architecture is on the Oriental order. Sixteen houses, to cost about $1,000 each, are being built at Lake Calhoun, near the motor line station, by L. F. Menage and others. Col. McCrory is building seven more, and L. F. Menage's fifty-room hotel at Lake Harriet is well under way. J. W. Tousley & Son are to build ten eight-room houses at a cost of $20,000, on sixteen lots in Blaisdell's revised addition, purchased at a cost of $18,355. B. F. Shaubert has become the owner of the Hurlbut block, purchased recently by Channell & Hayward. The price paid was $80,000. Washington Yale has purchased the Heaton block, at No. 220 Nicollet avenue, for something like $40,000. Mr. Heaton will probably build during the summer. B. J. West, Jr., is to build a three-story brick block on the corner of Fourth street and Fourth avenue south, to cost $20,000. Edward Sexton is building an $8,000 hotel building on the corner of Twentieth street and Fourteenth avenue south. The building is 30 by 86 feet and three stories high.

Plant and Whitney have commenced work on a house on Second avenue south and Twenty-second street for J. S. Bradstreet, to cost $10,000. Its architecture is Oriental.

Architect James C. Plant, of the firm of Plant & Whitney, let the contract last week for a three-story warehouse, 44 by 100 feet, to be built on his lot on Fourth street north between Second and Third avenues. The first story will be of cut-stone, the upper portion of red pressed brick. The walls will be strong enough to bear the weight of additional stories when the time comes to add to them. The lower story will be constructed for a wareroom, and the upper ones for flats. The cost of the building will be about $17,000. Thomas Jeffery is to build six tenement houses on Sixteenth street and Three-and-a-half avenue, to cost $18,000. J. D. Blake, $15,000 residence on Mount Curve avenue, adjoining H. B. Beard's. E. P Snell is to build on adjacent lots a $7,000 house. C. S. Davison is to build a handsome house on Highland avenue in Oak Lake this year. Phillip Haeffler's new house, on same avenue, is inclosed, and P. W. De Lancey has commenced work on still another. H. J. Bauman's house, one of the best built and most attractive in the addition, is about done. H. W. Freeman and Frederic Watson are both to build this season on Highland avenue, none of the six houses named costing less than $4,000 each. Jacob Barge is to build a Tivoli garden on the property recently purchased by him on Third street, next to the engine house. He expects to erect a $25,000 building. Kalkhoff & Hammond are having the plans drawn and will build a block for wholesale purposes on the corner of Third street and First avenue north, back of the Boston block. The structure will be 66 by 110 feet on third street, and will cost $75,000. It will be four or five stories high. The old buildings have been removed and the excavation will be commenced as soon as some details in regard to an alley can be arranged. The Harrison property on the corner opposite will be improved. W. B. Jackson and B. Cooper will break ground this week for four stories and warerooms 88 by 100 feet, and three stories high, on the corner of First street and Third avenue north, nearly opposite Deere & Co's warehouse. The building will be erected in the best manner, suitable for jobbers and implement warehouses, and will have vaults, elevators and track facilities. The Monitor Plow Works company will occupy one of the stores. The building will cost $20,000. J. C. Whitney is to build a row of thirteen tenements, to cost $40,000, on Sixth avenue south and Fifteenth street.

Madison, Wis.—The opposition to brick as a material, and terra cotta as an ornament, for the construction of the new courthouse, from plans by architect Koch, made by the Board of Commissioners, which was reported last month from a local paper, entirely gave way upon their examination of samples of terra cotta presented by the Northwestern Terra Cotta Company, of Chicago, and upon the decision to build of brick and terra cotta, the contract for the latter material was awarded to that firm. The pressed brick will be furnished by Harris Bros., of Zanesville, Ohio, and will require about 125,000. The terra-cotta contract is large, and will amount to about $16,000. Captain John Nader, architect and civil engineer, reports that work is opening up quite briskly in Madison this spring. He has finished plans for two new dwellings to be erected at once by Madison's old citizen, William Vroman, on Blair street, in the second ward. The Brown estate is about to enlarge and vastly improve the appearance of the "castle," in the second ward, according to plans drawn by said architect. The Charles Kayser property, on State street, in the first ward, is to be improved. Architect Jones reports that he has been drawing plans and specifications for parties in the city.

Monroe, Mich.—The Monroe Marsh Company is preparing to build a large clubhouse on House Island, half a mile from the lake. It will be two stories high, and have a frontage of 80 feet on the United States canal.

Omaha, Neb.—Large amounts of work are being projected.

Architect C. F. Driscoll: For Geo. P. Stebbins, two dwellings, three stories each, 44 by 20 feet to cost $7,200; separate contract. For Geo. B. Lane, two dwellings, three stories, 44 by 30 feet, to cost $5,000. For Mrs. R. M. ——, two-story and basement cottage, 24 by 36 feet, to cost $2,200. For Thos. Callan, hotel and restaurant, 44 by 66 feet, to cost $3,000. For Robt. A. Reed, two-story dwelling, 24 by 44 feet, to cost $2,800. For Fred. Forsdyke, two three-story dwellings, 44 by 32 feet, to cost $4,500. For Kent Hayden, two-story dwelling, 26 by 40 feet, to cost $3,000. Elsewhere the following: School District, St. Paul, Neb, eight-room school building, 76 by 78 feet, to cost $14,000. For E. E. Aylesworth, Council Bluffs, Iowa, two-story residence, 24 by 32 feet, to cost $2,800. For Geo. Metcalf, Council Bluffs, Iowa, two-story residence, 32 by 36 feet, to cost $4,800. For J. P. Lotta, Tekamah, Neb., two-story residence, 28 by 40 feet, to cost $4,900. Citizens of Fremont, Neb., Normal school, 76 by 64 feet, to cost $17,000. For J. W. Love, Fremont, Neb., two-story residence, 38 by 50 feet, to cost $5,000. For Osterman & Tremaine, Fremont, Neb., two-story and basement stone building, 22 by 100 feet, to cost $4,800. For H. G. Clark & Co., Omaha, four-story and basement stone structure, 22 by 132 feet, to cost $11,500. For First National Bank, Corning, Iowa, bank building, 22 by 100 feet, to cost $15,000. For Max Mohn, Council Bluffs, Iowa, a three-story hotel, 44 by 100 feet, to cost $15,000. For J. J. Hawthorn, Fremont, Neb., a two-story dwelling, 40 by 40 feet, to cost $3,500. School District, Hastings, Neb., eight-room

schoolhouse, 78 by 80 feet, to cost $18,000; W. L. Van Alslyne, builder. State of Iowa, for Institute of Feeble-minded at Glenwood, a dormitory college, 30 by 32 feet, to cost $2,000; same at Watertown, 20 by 20 feet, and 100 feet high, to cost $10,000; same, main building, 150 by 170 feet, two stories and basement, to cost $50,000; also a gymnasium building, to cost $2,000. In all the above the buildings are under way.

St. Louis, Mo.—The condition of building affairs promises to be very active for the spring and summer.

Architect W. G. Gains reports the building outlook good and building on the increase. For Theo. Rick, altering brick building, 45 by 20 feet, to cost $6,000. For George Koptenbrinck, three-story brick tenement, 50 by 65 feet, to cost $7,800; projected. For W. Whiting, one double tenement of brick, 30 by 55 feet, to cost $4,000; under way. For Mrs. Lahay, a three-story and mansard store, 65 by 50 feet, to cost $14,000; under way. For M. Bernaring, saloon alteration, to cost $2,500. For George Kahman, a nine-room brick cottage, 30 by 30 feet, to cost $4,200. For M. Smith, small dwelling, 20 by 45 feet, to cost $3,000. For M. Gannon, double tenement, 30 by 55 feet, to cost $4,300. For Charles Heine, two-story dwelling, 20 by 60 feet, to cost $3,800. For L. & J. Olden, freight warehouse, 50 by 163 feet, to cost $8,000. The last six above are all projected. For Morrisey & Glonous, private stable, 35 by 100 feet, to cost $4,000; under way. For trustees, a small frame church, 45 by 60 feet, to cost $8,500; projected. Also plans for two buildings not advanced enough yet for further information.

President Flad, of the Board of Public Improvements, has completed a machine for the purpose of testing granite and other stone street-paving material. The use of the machine was suggested by a dispute between the granite contractors, Allen & Vieths, and the board relative to the durable qualities of certain light red granite that had been rejected by the board. The testing consists of laying down a pavement four feet wide and about seven feet long in a substantial manner. A cart on two wheels, containing two tons of lead, is then placed on this pavement, which is made of two kinds of material, one kind under each wheel. This car is attached to a water engine, and is made to run backward and forward at the rate of about two miles an hour, making forty-eight miles, or forty thousand trips, per twenty-four hours. It can only be used on a stone pavement, as the lasting quality of a wooden pavement is said to be its capacity to resist atmospheric influences.

Architect Chas. F. May, Jr.: For Capt. F. R. Rice, residence and stable, brick and terra cotta, house two-story with attic and slate roof, 44 by 75 feet, to cost $25,000; just finished. For Dr. C. G. Rohlfing, three-story stone front residence, 24 by 72 feet, to cost $9,000; under roof. For John Obereider, store and dwelling, 44 by 70 feet, to cost $9,000. For Samuel Marlow, two-story stone-front residence, 22 by 50 feet, to cost $3,500; just completed. For Charles Wunderleck, four three-story brick and terra cotta dwellings, 75 by 72 feet, to cost $16,000; cellar completed. For Cour. Grote, a three-story pressed brick front dwelling, 23 by 52 feet, to cost $5,000; under roof. For Aug. Bohnenkamp, two-story pressed brick front dwelling, 23 by 90 feet, to cost $5,500; cellar finished. Gast. Wine Co., a two-story brick fermenting cellar, 60 by 100 feet, to cost $8,000; sublet. For C. F. Feirabend, a two-story pressed brick mansard dwelling, 23 by 52 feet, to cost $5,000; about to be let. For Henry Hoburg, a two-story pressed brick mansard dwelling, 23 by 52 feet, to cost $5,000; cellar finished. For Aug. Fitzell, three stone mansard residences, 23 by 52 feet, to cost $6,000; about to be let. For William H. Shyrock, two-story stone front dwelling, 42 by 50 feet, to cost $7,500. For I. J. Baker, two-story brick and terra cotta residence, 42 by 72 feet, to cost $1,200. For Robert Sheehan, two-story stone residence, 23 by 72 feet, to cost $5,500. For Bœhmer & Strangholmer, two stone front residences, 23 by 52 feet, to cost $5,500. For William Washmidt, one stone-front residence, 23 by 52 feet, to cost $5,500. For H. Dreer, one brick-front residence, 25 by 70 feet, to cost $6,000; the last seven above are about to be let

St. Paul, Minn.—Building prospects still brightening. New plans are being projected, and though the season is still backward, the year no doubt will be a marked one.

Architects Carpenter & Teltz: The St. Paul Chamber of Commerce building. The contractors are: Lucius Warner, brickmason; Wilkins & Romer, carpenters; Adams, Rothwill & Co., ironwork; F. G. Draper & Co, hardware; Beck & Hank, painters and glaziers; James Cullen, plasterer; Graham & Ward, plumbers; Lauer Bros., stonemasons; Frontenac Stone Co., stonecutting; Scribner Roofing & Cornice Co., slaters and galvanized iron work; W. E. Hate & Bro., hydraulic elevators, and Rogers & Davis, steamfitting. For Theo. Hamm, offices and brewery, three stories high and stone, 53 by 45 feet, to cost $10,000; projected. For Graves, Vinton & Co., bank building of brick, iron and stone. Aberdeen, Dak., 25 by 50 feet, to cost $10,000; projected.

Architect Egan, of Chicago, has had his plans accepted for the Ryan hotel without a dissenting vote, and some of the contracts are already let. St. Louis pressed brick will be used, Ohio sandstone and terra cotta. The cost of the entire improvement will amount to more than $1,000,000, with a prospective addition of a $500,000 annex next year.

Toledo, O.—The Ohio State *Journal* of the 17th ult., says: Attorney-General Lawrence went to Toledo yesterday to attend a meeting of the trustees of the new insane asylum at that place. It was intended to relet the contracts for work on the institution, but there seems to have been a slight hitch in the work, the architects' estimates of the cost footing $502,000, while the appropriation is only $500,000, and it was decided to postpone the letting of contracts for thirty days. A large number of contractors from all parts of the state, including several from this city, were present and were highly disappointed.

Watertown, Wis.—Several fine residences are going up in this thriving little town, together with a $20,000 hotel.

Youngstown, O.—Reference was recently made to the large number of buildings projected for the coming season. Architect Ellis, among other work, is preparing plans for a costly stone residence for John C. Wick, of the banking house of Wick Bros. & Co., to be erected at the corner of Lincoln and Wick avenues. Adjoining this, the same architect is preparing plans for a fine residence for Mr. Henry Wick. Careful inquiry among contractors shows that at least three hundred residences are now under contract or in process of erection.

Winona, Minn.—Architects Maybury & Son have furnished plans for rebuilding the Methodist church at Rochester, Minn.

PROPOSALS.

HARDWARE.

[*At Traverse City, Mich.*

TRAVERSE CITY, Mich., April 2, 1884.

Sealed proposals will be received by the Board of Commissioners *until 10* A.M. *of Wednesday, June 4, 1884,* at which time said proposals will he opened at the office of the Board of Commissioners, at Traverse City, Mich., for all locks, knobs and hinges required for the Northern Asylum for the Insane.

For information relative to specifications and conditions, address

C. M. WELLS, Superintendent.

TILE-FLOOR ARCHES, FURRING FOR CORNICES, AND COVERING FOR IRON COLUMNS.

[*At Toledo, Ohio.*

OFFICE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 10, 1884.

Sealed proposals will he received at this office *until 2 o'clock* P.M. *on the 16th day of June, 1884,* for furnishing and fixing in place, complete, the tile-floor arches, furring for cornices, and covering for iron columns, required in the Postoffice, etc., building at Toledo, Ohio, in accordance with drawings and specifications, copies of which and any additional information may be had on application at this office or the office of the local superintendent of the building, on and after the 19th day of May, 1884.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

TILE-FLOOR ARCHES, FURRING FOR CORNICES, AND COVERING FOR IRON COLUMNS.

[*At Peoria, Ill.*

OFFICE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 10, 1884.

Sealed proposals will be received at this office *until 2 o'clock* P.M. *on the 16th day of June, 1884,* for furnishing and fixing in place, complete, the tile-floor arches, furring for cornices, and covering for iron columns, required in the Postoffice, etc., building at Peoria, Ill., in accordance with drawings and specifications, copies of which and any additional information may be had on application at this office or the office of the local superintendent of the building, on and after the 19th day of May, 1884.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

IRONWORK, POSTOFFICE SCREEN AND ILLUMINATED TILING.

[*At Cincinnati, Ohio.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 8, 1884.

Sealed proposals will be received at this office *until 2 o'clock* P.M. *on the 2d day of June, 1884,* for furnishing and fixing in place the ironwork, postoffice screen and illuminated tiling required in the Custom House, etc., at Cincinnati, Ohio, in accordance with drawings and specifications, copies of which for each class of work, and any additional information, may be had on application at this office or the office of the local superintendent of the building.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

TILE-FLOOR ARCHES, FURRING FOR CORNICES, AND COVERING FOR IRON COLUMNS.

[*At Buffalo, N. Y.*

OFFICE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 10, 1884.

Sealed proposals will be received at this office *until 2 o'clock* P.M. *on the 16th day of June, 1884,* for furnishing and fixing in place, complete, the tile-floor arches, furring for cornices, and covering for iron columns, required in the Postoffice, etc., building at Buffalo, N. Y., in accordance with drawings and specifications, copies of which and any information may be had on application at this office or the office of the local superintendent of the building, on and after the 19th day of May, 1884.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered. M. E. BELL, Supervising Architect.

TILE-FLOOR ARCHES FURRING FOR CORNICES, AND COVERING FOR IRON COLUMNS.

[*At Quincy, Ill.*

OFFICE SUPERVISING ARCHITECT
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 10, 1884.

Sealed proposals will be received at this office *until 2 o'clock* P.M. *on the 16th day of June, 1884,* for furnishing and fixing in place, complete, the tile-floor arches, furring for cornices, and covering for iron columns, required in the Postoffice, etc., building at Quincy, Ill., in accordance with drawings and specifications, copies of which and any additional information may be had on application at this office or the office of the local superintendent of the building, on and after the 19th day of May, 1884.

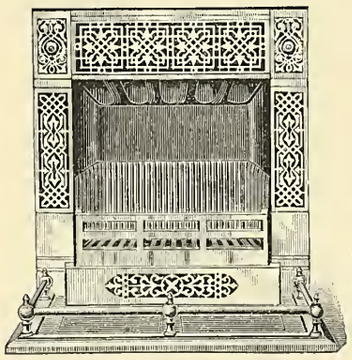
Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating GRATE.



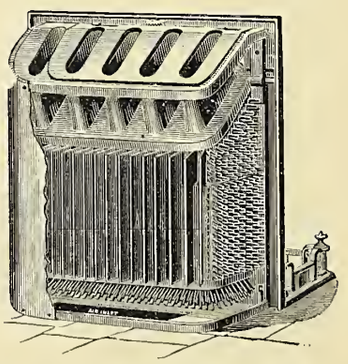
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

THE INLAND ARCHITECT AND BUILDER.

Vol. III. No. 5

JUNE, 1884.

THE

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on last page of supplement.

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SUBSCRIBERS who find subscription blanks inclosed in their paper are reminded that their subscription expires with this number, and to insure the continuance of the paper they will need to forward renewal promptly. Address The Inland Publishing Co., publishers THE INLAND ARCHITECT AND BUILDER, 17 Tribune building, Chicago, Ill.

To Architects and Draughtsmen.

ARCHITECTS requiring draughtsmen are invited to correspond with or call upon us, as we have the addresses of quite a number of draughtsmen who are seeking employment. It can also be borne in mind, by both architects and draughtsmen, that we proffer them the use of our office as a medium of communication, and all inquiries will receive prompt attention.

FREQUENT expression has come to us from architects throughout the West in regard to the formation of a Western association of architects. It is suggested that a meeting of the profession be held some time in the fall to take the preliminary steps in such an organization; and in order to form some definite idea of what can be expected from the architects at that time, we invite each member of the profession in the West to send his name to us for *immediate* record. This need not be regarded as a promise, but rather as an indorsement of the movement. We shall also be glad to receive farther comments from those architects who believe, with those already heard from, that the time has come when an active association of ideas and exchange of professional courtesies should be made between Western architects. It is a fact, the truth of which needs no argument, that no profession ever did succeed, in a large sense, that pursued a guerilla mode of existence, and did not combine in social and more or less professional association. It should be distinctly understood that this invitation is extended to every architect in the West, and should have no purely local significance.

A CIRCULAR letter to the architectural profession, and of great interest to the public at large, for the improvement of the American systems of architectural competition, has been prepared by the Architectural Association of Des Moines, with the hope of turning earnest thought toward this subject. The circular says:

As at present carried on in the United States, architectural competitions demand the attention of the Postoffice department in its efforts to suppress the various lottery systems throughout the country.

The only just system of conducting competitions, which is rapidly extending from France and Belgium to all civilized countries, is based upon advancing human welfare. To illustrate: A city of 20,000 is in need of a City Hall. This is a subject of interest not to this one city alone, not to merely 20,000 people (much less a little handful of architects), but every city of that grade is concerned in some improvement being made in this class of building.

It is made of first importance, therefore, that *advance* be made. Rewards in money are offered, fully adequate to repay any architect whose study shall prove of universal value. The local building is made secondary. The practice is even being introduced of a second, close competition, to finally solve the design to be executed—the first competition, for advance, being open to all the architects of the world. Where but one competition is undertaken, it is frequently the third in rank that is awarded execution. All designs of worth, but not producing any real advance, can justly claim no pay. They are fully rewarded by ranking such studies in the order of merit. One-half the number of judges are named by the competitors themselves, while the other half represents the local authorities, but always includes professional talent of the highest grade, as the local Engineer of Construction, and in France the Architect of the Department. The value of such a system may be understood when it is known that it is producing, at the present moment, a progress so rapid, work cannot be executed ere it is again surpassed by competitive design. At the national yearly exhibits designs of international importance are awarded medals, and extend their influence even to America.

The Architectural Association of Des Moines asks your thoughtful consideration of this subject, for it demands prompt and concerted action.

Respectfully, E. H. TAYLOR, *Secretary.*

The first paragraph in the circular speaks volumes, and is a reiteration in another form of what we have repeatedly said in regard to so-called competitions. It is only those who have never responded to invitations to submit competitive plans, with working drawings, etc., on the stereotyped plan of "all designs subject to approval by the board of commissioners," "any and all plans can be rejected," "the plans to become the property of the board," "two hundred dollars to the successful architect," etc. etc., who will fail to appreciate it in its fullest significance. The suggestion contained in the circular, that it is well to copy the mode of procedure in regard to plans and methods of competition from our foreign brothers, is an important one, and in the new impetus which architecture in America has received in the past few years we hope will be included some of the customs of the old-world architects, as well as their thoughts and creations. No architect who respects his profession will enter into these lottery schemes, and they cannot until competitions are honorably conducted and the judges of them are sure to be the highest architectural authorities to be secured, and not the general public, who of necessity are unable to judge in the faintest degree of what true architecture consists. As it

now is, not even in the majority of cases are they able to realize why an architect "should charge for a few drawings," the same work, aside from the professional skill involved, having cost the architect hundreds of dollars for office work. The time has come when architects should answer this call and take concerted action on this question that is daily growing, and not only damaging our profession as a profession, but ruining the architecture of the country.

A DECISION has just been rendered in the Superior Court of this city which is of considerable interest to the building public, and especially to architects, as it is said to be the first case of the kind ever tried in this state. The decision given would seem to settle the question of the liability of architects for defects in the construction of a house which is under his supervision. As the law now exists, an owner or builder who employs an architect to construct a building has no redress for imperfections in the building, in case the architect accepts it as a compliance with the terms of the contract. The case in point was that of a lady who employed an architect to construct for her a building in this city. When completed she complained that the work was imperfectly done, but, against her protest, she was compelled to pay the contractor the amount due on his contract. She then brought suit, and, having clearly established her allegations, was awarded a verdict. The case on both sides was represented by able legal counsel, and was closely contested.

HOW soon the time will come when electric lighting will be substituted for gas in lighting the streets of Chicago, it is impossible to form even a conjecture. We have quite recently had an ample demonstration that the manufacture of gas is quite as susceptible of great improvement as has been that of electricity, and it is barely possible that with two such powerful agents coming into close competition for supremacy, the illuminating power of gas is capable of still further improvement, and that, too, without very materially increasing its cost. Gas companies who have millions of dollars invested in their plants are not likely to relinquish the prestige they have so long held to any other illuminating agency without a fierce struggle, and with still further improvements in the processes by which gas is manufactured they may be able to hold fast to that which they consider "a good thing," for many years to come. A case in point is furnished, as an illustration, in the prosperous town of Chesterfield, England, the streets of which, until within a short time, have been lit by the electric light, originally by the Brush dynamo machine; and arc lamps, which give a powerful light, were alone employed. Subsequently the incandescent system of electric lighting was introduced. Now the town has returned to the use of the original illuminant—coal-gas. Some two or three years ago the corporation of the town paid the gas company 24s. 4d. per lamp per annum for cleaning, lighting and extinguishing the lamps; the gas company then sought to raise the price per lamp to 28s. This advance led to the system of electric lighting. The electric light company refused to renew its contract at the old rate, and then the gas company agreed to charge 21s. per annum per lamp, and to supply the gas at 3s. per 1,000 cubic feet, as against 4s. 3d., the old rate. This tender was accepted. One of the speakers said he thought "the introduction of electricity had done a considerable amount of good. It had done good to electric light companies, to gas companies and to the town council. It had shown electric light companies that their theory of arc lighting for all streets would not do, that there must be smaller lights. It had taught gas companies that they could not put down their foot so firmly and say, "You shall not take any other light." It had taught local authorities that they had means in their own hands of competing with gas companies if the latter would not be reasonable in their charges." This shows that in one case at least the electric light company have failed to compete with gas, and that gas in England can be furnished at a minimum price.

IN the foregoing statement of a fact it is not our intention to be understood as opposing gas companies or favoring the electric lighting system, one as against the other. The progress of electric lighting is not and has not been so great in itself as in the growing favor with which it has been received by the public. The fact that the corporation of a single town in England has returned to the use of coal-gas as an illuminator by no means settles the problem of the cheapest and best means of lighting our cities. At this time there is going on at Wimbledon, England, an important and interesting series of experiments in street electric lighting. The sole object of these experiments is to determine the best method of illuminating streets in towns and cities, and of distributing light by electricity,—cost, of course, forming an important factor in the consideration. An English paper says that to this end the experiments, which will extend over some weeks, will be very exhaustive, the intention being to test every appropriate system. An engine and dynamo machine have been placed in position, and an ample supply of electricity is thus provided. Between one-and-half and two miles of streets are already lighted, overhead wires and incandescent or glow lamps, as they are now more correctly and euphoniously termed, being used. Besides a variety of lamps it is intended to try various modes of distributing light by means of shades and reflectors. The experiments are not under the control of anyone connected with any electric light system or company, but are carried out in a perfectly independent manner, and in their results are likely to prove of considerable public value in tending to solve the problem of economical and efficient street lighting by electricity. We shall take pains to announce the result of these experiments as soon as they are completed and the official report is made thereon.

THE rapid growth and extension of Chicago in all directions is something which not only surprises all strangers who visit the city, but is in itself marvelous. The great question which is now pressing itself upon public attention is the enormous travel that demands quick transit from one extreme of the city to the other. For miles all around three sides of this wonderful city there has sprung up within the past decade little suburban villas, which contain in the aggregate a large proportion of Chicago's business people. Thousands of homes of Chicago people lie north, west and south of the city proper, beyond the reach of horse-cars, to reach which the only means provided is by steam-cars. These bordering along the lines of the railroads, do not entirely meet the full measure of the want felt, but something else, more convenient, cheaper, and which will traverse the routes more frequently, is desired. The whole problem of speedy carriage will in the end result in either underground or elevated railroads. The efforts to secure a new road for the central part of Hyde Park, lying too far from the Illinois Central on the east or the Rock Island railroads on the west to get the benefits of their facilities, are meeting with the almost unanimous favor of the residents and property-owners. It is not unreasonable to suppose that if such facilities were afforded it would add immensely to the population of Hyde Park and increase the value of realty in that direction to the extent of millions of dollars. To the west, and especially to the north, where a still more beautiful, extensive and healthful section is awaiting a better transporta-

tion system, the same remark will apply. The experiment of elevated railroads in New York has met with such unprecedented success that Boston has at last adopted that scheme, while Brooklyn has opened one of its leading avenues to steam. The time is not very distant when Chicago will have to consider what means shall be adopted to render transit from one extreme point to the other not only expeditious, but safe, pleasant and desirable.

A CHICAGO engineer has invented, or discovered, what he claims to be an "effectual means" of disposing of sewer gas. The paper that makes this announcement says that the device, which it refers to at length, is not patented, but that "the inventor regards it with especial pride," and further adds that "many experienced engineers who have looked at it are satisfied of its merit." It is claimed that this new method possesses the advantage of consuming the air polluted by sewer gas entirely, and that the cost is merely nominal in putting it up, and virtually nothing afterward, as the combustible element of the gas offsets the trifling loss of steam. But this is not all. The inventor also claims for his machine the merits of a smoke burner! That is quite enough. It would take a good deal of figuring to tell just how many buildings there are in this city that need — badly need — just such a contrivance as this, and the inventor, if he does not know it, is hereby advised to get his device patented, form a company for its manufacture and sale, and hereafter quit the drudgery attending work in an engine-room, and cultivate a taste more æsthetical, which he can soon afford to do, provided his machine is what he claims for it, and the paper in question says it is.

THE raid going on upon the walnut timber in this country for the purpose of exporting it to England and the continent, largely to the former, is by no means a new thing. English capitalists have been for more than a half-score of years invading the walnut-growing sections of the West, and through their representatives buying up all the desirable walnut timber they can find to purchase. The buzz-saw, directed by foreign capital, has been busy in the woods where walnut abounds for a number of years past, and the depletion of many sections of the country where, in former years, this valuable timber was found in its stately growth in the greatest abundance, is a matter of regret. In the states of Ohio, Indiana and Iowa this timber has now become so scarce that it commands a fabulous price, and even for the stumpage extraordinary prices are paid. The truth is, that a company of English capitalists, with whom a wealthy combination in Indianapolis is coöperating, have been for some time quietly getting possession of all the black-walnut timber it has been possible to buy, and are now shipping it to England. This company has had buyers out all through the states mentioned, and wherever they could find a farmer who would sell his walnut timber they have bought it, but at a price, in many instances, far below its value. In many cases the farmers have disposed of their trees at prices far below their value, and it has only been recently that they have become aware of the scheme that is to take out of the country the most of the remaining black-walnut timber in it. The consequence is, that all the walnut the company now buy costs them double the price they were paying a few months ago. We happen to know a farm in Rush county, Indiana, where there is a plant of twenty acres of walnut timber of nearly fifty years' growth. The farm is owned by an English gentleman, in whose family it has been for many years, and the same company to whom allusion is made would despoil his farm of this splendid growth of walnut if he were so impecunious as to let them have it. Money, however, in his day and generation, will not be able to purchase it, so that the time is probably quite remote when any of the walnut from this splendid farm will reach England.

Fireproof Theatres.

FOR some time past rumors have been circulated that another theatre was in contemplation, the project having its origin with some Eastern parties, and the premises selected for conversion into a theatre being buildings north of Madison street on Wabash avenue. Announcements have already been made that the premises to be thus converted to "light comedy and variety purposes" is to be completed and ready for occupancy by October 1, and "promises to be first-class in every detail." Without having seen any of the plans of the proposed structure,—if such a theatre is carried out, it is most important it should be thoroughly fire-resisting. Any theatre that may be hereafter constructed in Chicago should be built from the ground up in a manner which will entitle it a thoroughly "fireproof structure" in all the details that such a term can possibly imply. It is simply absurd to undertake, even at "a cost of $50,000," to erect such a building in the locality named by reconstructing the buildings already standing, and which were built shortly after the great fire for purposes wholly of a commercial character. In recent issues of the *Building and Engineering Times* (London, Eng.) a series of exceedingly valuable and interesting articles have appeared on "Theatre Planning and Construction," written by James George Buckle, A.R.I.B.A., and Ernest A. G. Woodrow, A.R.I.B.A., which have already run through some fifteen or sixteen issues of that journal. It is probable that when the series is finished they will be given to the public in book form, as it is just such a book as this, written on a subject which so deeply concerns the public, and by gentlemen of such wide repute in their profession, as will prove of almost inestimable value to theatrical architects and builders. In the first eleven articles of the series the effort has been correctly and successfully made to give an accurate description of the numerous requirements calling for special provision in a theatre. The nature of a satisfactory site, the disposition of the several exits, the general arrangements of the auditorium, seating accommodation, public rooms and conveniences on the several tiers, the requirements of the administrative offices, the stage and its appurtenances, including the dressing-rooms and workshops, have all been carefully considered. In every respect the nature of the work carried on in the several parts of a theatre are fully described, so that all these matters are made plain even to the lay readers. In article twelve of the series the authors enter upon the consideration of "fire-resisting materials," and hold that in building a theatre the primary object should be to construct it in such a manner as to render it practically fire-resisting. Whatever may be said about all the theatres heretofore built in this city, it cannot be said that there is a single one that is practically fire-proof. The arrangements in some of them for speedy exit in case of fire are perhaps the best that can be devised, since hardly any one of them was constructed on the wisest and safest principles in the first place. It is certainly time, since Chicago has now reached the growth of a great and growing metropolis, that any and all theatres constructed in the future should fulfill to the letter, not theoretically but practically, the absolute requirements of a thoroughly fireproof structure. "Hitherto," says the paper, "it has been the fate of all theatres to 'die by fire,' but there is no reason why, with present constructive resources, this should continue to be the case in the future." In considering the best method to adopt in order to secure immunity from fire, many matters call for special attention other than the incombustible nature of the materials used in constructing a theatre. To the ordinary observer a building may appear to possess all those conditions opposed to the spread of a conflagration, and yet in reality be a very hazardous risk from a fireman's point of view. It has been demonstrated beyond the point of controversy that iron and stone, both indestructible in themselves, are in combination the least desirable form of so called fireproof construction. This was clearly demonstrated in the Chicago fire of 1871.

Practical firemen will bear out the testimony of Chief Shaw, of the London Fire Brigade, that stone is the most unreliable of all materials. From the result of careful observation made at many fires, he found that "bricks were uninjured; wood was seriously damaged, but only partially consumed; iron was fractured, and consequently rendered worthless, and that stone was shivered into fragments and totally destroyed." In two large public buildings which were destroyed by fire, the utter worthlessness of stone and iron for resisting even moderately high temperatures, such as 600° or 700° Fah., was exemplified in a startling manner, and in both cases the comparative safety of wood and the absolute safety of brick were clearly proven. The writers say:

"The first essential necessary to the production of a fire-resisting theatre, having regard to the materials used, is to divide it vertically and

horizontally into as many separate fire-resisting compartments as practicable, so that any single division could be burnt out without the fire spreading to other parts. This was pointed out by Saunders in his work on theatres, published in 1790, yet it is not till 1884 that the principle is at all insisted upon; but even now the system is but seldom practiced to its full extent, as advocated in these papers. It is also desirable to keep the theatre as low as possible, for the reasons pointed out in previous articles, and likewise because of the difficulty experienced in controlling fires breaking out in large buildings. It has been asserted on reliable authority that 216,000 cubic feet is 'the largest cubical capacity which can be protected with reasonable hope of success.' This is the cube of 60, and about the size of an ordinary auditorium, which should be so constructed as to be easily shut off from stage, dressing-rooms and entrance corridors. The walls and floors of the whole building must be so built, and of such materials, that if the contents of any separate division should be accidentally fired, the whole may be absolutely consumed without calcining, melting or otherwise destroying the walls or floors, and without communicating the fire to other parts of the building."

What material to use in order to acquire such conditions is a question not easily answered, seeing that even now much confusion of ideas exists as to what really is a fire-resisting material. Stone is not fire-resisting. Iron expands and contracts when exposed to changes of temperature. Whether used in the form of columns or girders, it becomes distorted when subjected to excessive heat. It will succumb under its superincumbent weight in every conflagration where it is exposed. Cast-iron in construction will crack when subjected to sudden changes from heat to cold. Yet this is one of the materials regarded as fire-proof, irrespective of the manner in which it is used. The conclusion arrived at is, that a fire-resisting material should be a bad conductor of heat, and withstand a temperature of 2,000° Fah. without weakening. Combustible materials are invariably bad conductors of heat, whilst non-combustibles are generally good conductors. In the first class may be included all kinds of timbers, and in the second class metals generally. There are also other materials used in building, which vary considerably as regards conductivity according to their density and chemical constituents. These include stones, bricks, terra-cotta, cement, glass, etc. The heat-conducting power of various materials is of considerable importance to the architect. Observation and experience has shown that the most dense bodies are the best conductors of heat, and that the conducting power decreases as the density becomes less. Thus metals are regarded as the best conductors; then stones, and next hard woods. This is the general rule; but there are exceptions, and the metals themselves show this in a remarkable degree. Platinum, for instance, is about two and a half times heavier than copper, bulk for bulk; yet the power of conduction is as 898 in copper and 381 in platinum. The comparative facility afforded by some of the building materials for transmitting heat is as follows:

Slate	1,000	Firebrick	620
Lead	5,210	Asphalt	451
Flagstone	1,110	Oak	336
Portland stone	750	Lath and plaster	225
Brick (average)	660	Cement	200

The authors of the paper in question therefore hold that whilst designing a theatre, or any building subject to more than ordinary risk of fire, it is desirable to select the materials with due regard to their position and powers of conduction, and thus adapt each material to the part it has to take in the building, whether as a structural part, minor detail, or mere fitting. Although it will be difficult to make every part fire-proof, an endeavor should be made to introduce the least possible amount of material likely to feed the flames in the event of a fire. With good sound brick walls, real division of the several parts by walls of similar materials, and an entire absence of matchboarded partitions, the risks attendant on the theatrical business need no longer give cause for alarm. The finishings of the floors, lobbies, etc., should be in tiles or marble mosaics. Terra-cotta, plaster or cement should be used for the decorations and internal architectural features and details in lieu of thin veneers of wood and canvas, which latter, it is hoped, are theatrical embellishments of the past. It cannot but be hoped that if such a theatre is built on Wabash avenue it will meet these requirements. It must not be forgotten at the outset that a theatre can never be a cheap building as compared with other buildings of equal size. Cheap construction is the paramount evil in all theatres making no pretense to fireproof construction, and where the principal materials internally are matched boarding and canvas.

Messrs. Mesker & Bro., of St. Louis, have recently closed contracts for the following: 20,000 square feet of skylights on the St. Louis Exposition and Music Hall building; galvanized iron cornice, tin and skylight work on Pope's theatre; and one carload of galvanized iron cornice for U. S. Army and Navy hospital buildings at Hot Springs, Ark.; one carload for block of store buildings at Weatherford, Tex.; one carload for store buildings at Mexico, Mo., and one carload for Sisters of Good Shepherd buildings at New Orleans, La.

Lamps and Gas-Fixtures.

BY FRANCIS LE BARON.

THE press and the pulpit claim to be the great civilizers of mankind, but those who *light* the world do more for its morality and advancement than pulpit and press together. It may seem a strange paradox to assert that the morality of a community may be measured by its lamps and gas-fixtures; but look at it fairly for a moment and the paradox is seen to be a truth,—the more lamps and gas-fixtures, the more light; the more light, the greater the morality. As good drainage drives away disease, so plenty of light drives away crime. The best protection of bank, or store, or office, against robbery is a gas-jet. Once it was iron doors, iron shutters, ponderous locks, and chains, and bars, and bolts; now it is plate-glass and light. The thief fears the policeman's "bull's-eye" more than his club. Are not the lightgivers more effective than the preachers? In the grand poetry of David's Psalms we read of God being "clothed with light as with a garment"; now, the more we possess of this garment, the more like God shall we become. Goethe cried with his last breath, "*Light, more light!*" as if with illuminated vision he saw in that supreme moment that the curse of the world lay in its darkness.

It is a vast stride in the world's civilization from a farthing tallow-dip, with its flickering flame that no amount of snuffing can brighten, that only makes darkness visible, to a cut-glass chandelier, with its radiant ranks of stars, its long, graceful prisms flashing myriad iridescent tints till the whole shining mass seems like a suspended shower of jewels.

Seventy years have not passed since gay, splendid Paris was lighted by tallow-candles, and the legend is, that when the allies occupied the city after the fall of Napoleon, night after night the streets and theatres were in total darkness because the Cossacks would eat the candles, climbing the lamp-posts and robbing the theatres for the sake of the toothsome morsels.

"The streets of London," says Macaulay, "which now afford to the artisan, during the whole night, a secure, a convenient, and a brilliantly-lighted walk, were, a hundred and fifty years ago, so dark after sunset that he would not have been able to see his hand, so ill paved that he would have run constant risk of breaking his neck, and so ill watched that he would have been in imminent danger of being knocked down and plundered of his small earnings."

The streets of London were left in profound darkness, and thieves and robbers plied their trade with impunity till the last year of the reign of Charles II. In this year, according to Macaulay, an ingenious projector named Edward Heming, obtained letters patent conveying to him for a term of years the exclusive right of lighting up London. He undertook, for a moderate consideration, to place a light before every tenth door on moonless nights, from Michaelmas to Lady Day, and from six to twelve of the clock. Those who now see the capital all the year round, from dusk to dawn, blazing with a splendor compared with which the illuminations for La Hogue and Blenheim would have looked pale, may perhaps smile to think of Heming's lanterns, which glimmered feebly before one house in ten during a small part of one night in three. But such was not the feeling of his contemporaries. His scheme was enthusiastically applauded and furiously attacked. The friends of improvement extolled him as the greatest of all the benefactors of his city. What, they asked, were the boasted inventions of Archimedes when compared with the achievement of the man who had turned the nocturnal shades into noonday? In spite of these eloquent eulogies, the cause of darkness was not left undefended. There were fools in that age who opposed the introduction of what was called the new light as strenuously as fools in our age have opposed the introduction of vaccination and railroads, as strenuously as the fools of an age anterior to the dawn of history doubtless opposed the introduction of the plough and of alphabetical writing. Many years after the date of Heming's patent there were extensive districts in which no lamp was seen.

If the streets were in darkness, the houses were also in darkness, and the sick and dying had no gleam of light to comfort them, for, by a law of William the Conqueror, every man was obliged to rake out his fire and put out his light when the curfew-bell rang. This curfew (*couvre-feu*) peal sounded at eight o'clock, and from that hour till morning the household was in darkness. Now every house must have its gas supply, and every room its array of beautiful gas-fixtures, ready, at the touch of a button, to flood us with light from blush of sunset till glow of morning if we desire it. Oh, what wonder was it if the passing generation was a profaner one than the present! Fifty years ago there was no gas, no electric lighting, no matches, even. The tinderbox held our only hope of light or fire, and of course it was a necessary article in every household. It contained a mass of tinder, a flint and a piece of steel, which had to be struck rapidly by the flint, sending down upon the tinder a shower of sparks which finally caught, but the fingers often suffered, and were bruised and bleeding before the fire was kindled. Oh, impatient mortal, when the head of the match, scratched on the boot-sole, flies sputtering away,—think of the old tinderbox, and don't say "d—n!"

A pine-knot was the first illuminator; then came lamps and candles, the lamps and candelabra often most beautiful in form. The antique lamp,—oldest of all forms, found in Etruscan tombs and in Egyptian sepulchres, more graceful than anything we devise in this day,—was in form like an egg divided lengthwise, the handle at the larger end, the smaller end being pinched into a beak for the wick. The lamp that one can buy today in Athens, made of brass, or bronze, or silver,—sometimes called the Roman lamp (for the Romans copied the Greek forms),—consists of a stem with branches, and from each branch hangs by delicate chains a lamp of this antique pattern. The astral and solar lamps, which did good work in their day, have been pushed aside, but the flat and round-wicked lamps, in some form, the French "Carcel" and the German student-lamp still hold their own, and are a rest and refreshment to tired eyes strained and wearied by attempting to read or work by bad gas. But since coal breathed out its soul in flame for the benefit of man, lamps have hung their diminished heads, and candles have dwindled into an aristocracy, as representing the first families among illuminators. The Egyptian lamp forms were full of grace, yet weird and strange as its architecture. In a description of Belshazzar's feast are the following lines:

> "The ineffable beauty that dwells in the face
> Of the Sphinx wore a soft and mysterious grace,
> Dim even amid the full flood of light poured
> From the thousand high-clustering lamps on the board,—
> Those lamps, each a serpent of jewels and gold,
> That seemed to hiss forth the fierce flame as it rolled."

To the ancient nations fire was sacred: the Persians and Chaldeans worshiped it; by the Arab, the enemy who came within the light of his fire was treated as a friend; the household fire on the hearthstone of the ancient Briton was never extinguished so long as the family remained; the Greeks and Romans counted fire as a peculiar possession of the gods, and their fable tells how Prometheus was bound to a rock, with a vulture always tearing at his vitals as a punishment for stealing fire from heaven and bringing it to men. But we have changed all that. In this age our Prometheus marches boldly up to Olympus, takes Jupiter by the collar (if gods wear collars) and marches him down to earth, exhibits him in all our cities, binds him in the cities' streets, and forces him to use his thunderbolts as illuminators. We dine, read Puck, and go to the theatre, and the lightning, imprisoned and veiled, serves to light us, and has become the slave of our convenience. Edison has triumphed over Olympus, and Jove's thunderbolts are now sold out at a profit by a dividend-paying company. Is not this an advance on the pine-knot and the resin-torch?

The Emperor Nero was fond of a peculiar kind of illumination,—he fancied a Christian rolled in resin, and lighted at one end to give brilliancy to his games and gladiatorial contests. The Christian served for a wick, and this wicked show greatly delighted the wicked Nero, but this style of candle soon went out of fashion. Aladdin's lamp was a very noted one, but who would not prefer to own Edison's incandescent?

As people grow to love light rather than darkness, they get to liking beautiful forms for their lightbearers, rather than ugly ones. Before the London World's Fair, gas-fixtures were an abomination; they had no grace, no elegance, no beauty; they were hideous masses of bronze or gilt loaded down with ugly details that were called "ornaments." But these forms soon died out, killed by their own gracelessness, and at the time of the Paris Exposition gas-fixtures had acquired grace and elegance of form, and were beautiful. They have been improving from that day to this. Today there is nothing more pleasing or interesting in industrial art than a fine display of gas-fixtures. The cry in Bagdad was, "New lamps for old!" when Aladdin lost his wonderful lamp, and all his riches took wings and flew away. "New lamps for old" may well be cried in Chicago streets today, so beautiful and attractive are the new forms in this branch of art. Let anyone who has an Aladdin's lamp give it a good rub, fill his purse with money, and spend an hour or two among the gas-fixtures. No pleasanter way to pass a morning can be devised than to spend it in the beautiful parlors that are fitted up to display these artistic forms. We advise all ladies who enjoy beautiful art to visit these parlors, and change their old fixtures for new. In these showrooms, bright as gardens of Aladdin, one finds metals wrought into a thousand graceful forms, glass globes and shades bright and radiant as the petals of flowers, jewels flashing in every color of the rainbow, and cut-glass more brilliant than jewels. Mr. E. Baggot, one of our oldest "Apostles of light," shows a chandelier of Persian pattern. The center is in most classic and elegant vase-form, exquisitely wrought in delicate tracery that covers the whole surface. This vase carries six branches with the light. The whole is in antique brass. A fixture of wrought iron, with ruby-glass center, has great beauty; the ruby-glass vase is covered with delicate wrought-iron work, and a light within shows it off to great advantage. The elegant designs in richly polished brass, with trimmings of oxidized silver, are much to be admired. They are among the newest patterns shown, and have true artistic merit. A lantern of antique brass, holding a richly jeweled globe, makes one think by contrast of the lanterns Diogenes lighted in the streets of Athens in broad daylight in his search for an honest man, but this one puts you into so pleasant a frame of mind that you think all men honest. In a richly furnished room nothing could be more beautiful than one of these chandeliers of hammered Cyprus copper and polished brass. The design is light and elegant, the dull red glow of the copper fascinates one, and the novelty of the combination is very attractive. Here is one composed of crowns of polished brass with rows on rows of crystal balls, cut and uncut. Another of antique brass holds a vase of alabaster, and the globes are of cut glass. Still another is made entirely of oxidized silver, set with ruby jewels. The globes and shades are infinite in form and color. It is like a floral display. Some very brilliant ones are surrounded with wreaths of fruit or flowers in very high relief and in the natural colors.

In the art parlors of the Corboy, Wingrave & McNaughtan Co., recently opened, there are also displayed some very beautiful gas-fixtures. One style of chandelier, in burnished gold, has a drop-light, the large glass shade of which is covered with a cuirass of gold openwork (foliage pattern), with birds and butterflies flitting over it; nothing could be prettier. There are also some elegant hall lanterns to be seen here, the sides of beveled glass framed in antique brass of very fine design. The aristocratic candle is again asserting itself and coming into fashion after a long rest. Fixtures of all kinds bristle with white porcelain "candles," and the effect is more pleasing and more natural than that of most imitations. They make a fine show on brackets of beaten brass, with five lights, and if a beveled mirror doubles the number of lights the effect is much more beautiful. We noticed a graceful toilet fixture, the pendant, holding two "candles," dropped from a bracket placed at any desired height on the wall. A hall sconce of brass, very elegantly wrought, and holding three "candles," was noticeable for its great artistic merit. But all housekeepers cannot fail to be delighted with this company's display of andirons and fenders; of brass stands with onyx tops; of painted card-receivers in antique brass and gold, of the most quaint and charming patterns; and with the great variety and beauty of the hand-painted shades exhibited here. Some of these are painted with pansies and are as lovely as bowls of the fresh and brilliant flowers. Some bear branches of hawthorn, and are as gay as spring itself. There is also a fine collection here of small beveled mirrors in many shapes, framed in brass and silver. An oddity in the way of gas-fixtures is a hall lantern in the shape of a drum. The drum-heads are of beveled glass, the rim is of beautiful openwork brasswork. We recommend it to some music lover. The globes here are of infinite variety, Bohemian, jeweled, cut and colored in every variety of tint. The crystal chandeliers, always in fashion, always beautiful, are just one blaze of indescent color, with cut-glass shades and cut-glass prisms and drops. Some of them are of the corona pattern, and are like fountains of light. These art parlors are divided into four compartments, each compartment rich in rare and novel designs, a most delightful place to spend a morning.

The Archer & Pancoast Manufacturing Co., H. G. Willard, manager, has not yet opened its warerooms on Wabash avenue. The windows are covered with white chalk, which shuts out curious glances like a fog, but the sound of preparation is heard within, and the manager promises to display his treasures to the public about the middle of the present month. The factory of this company is in New York, with salesrooms in New York, Boston and Chicago. The display, when in readiness, will doubtless be rare and artistic.

We recall some old-time gas-fixtures whose patterns were effective and not without merit. For newel-posts there were bronzed knights, on foot or on horseback, with golden bugles lifted high, whose tunes were sung in tongues of golden fire; and there were bracket-lights of elephant heads, with huge ear-flaps and eyes of wise scrutiny, blowing from their lifted trunks a small fountain of light; and flowers, single and in clusters, virginal white Easter lilies, golden crocuses, purple pansies, whose stamens were shoots of flame.

In the windows of the W. C. Vosburgh Manufacturing Co.'s spacious and attractive store may be seen many attractive things. You cannot help stopping, as you pass, to gaze in at the new and fanciful designs, where use and beauty unite so gracefully. One curious lamp cannot fail to attract attention. It is a stork's leg and claw in polished gold, supporting a very handsome lamp. This can be moved about the room, and used at any point desired. In their showrooms one sees many artistic designs and much fine work of their own manufacture. There are gold and jewels galore, there are beaten brass, and Cyprus copper, and antique gold, and oxidized silver, all combined in new and charming designs that will add beauty to every dining-room, and parlor, and hall, and library in which they are placed. For very little gold one can purchase here much brass, and silver, and gold, and bronze, beaten into elegant shapes, which will fill the house with a flood of light. If you want the splendid glitter, the changing, rainbow grace of cut-glass, you will find it here, and if you

would make your parlor into a flower-garden, here you buy shades and globes glowing with every color and shade and tint under the sun.

Last, but not least, we ask you to look at the vast and unique display at the store of H. M. Wilmarth & Bro. This is an old standby and a well-known house, and their art parlors always reward one for a visit. Here we find some wonderful Persian work, the lights carried on gold spirals, which have a most charming effect. The chasing is handwork, the form that of a Persian pipe. One chandelier shows the rich, dull red of beaten Cyprus copper in contrast with gold-brass, the cups suspended above the burners being of brass lined with the deep-toned copper, a very beautiful combination. A crystal chandelier, entirely of cut-glass, pure and splendid, fit for ballroom or drawing-room, makes all metallic lustres dim. It carries twelve burners, and a cut-glass ball at the bottom of the chandelier regulates the light of all. I found here one of the most striking and beautiful ornaments for hall or parlor that I have seen. It is an oxidized silver sconce with a beveled plate-glass mirror; a branch of foliage in oxidized silver crosses the mirror, and in front are five small burners covered with ruby-glass globes, about an inch and a half or two inches in diameter, and looking like a cluster of splendid chimes, or some unknown celestial fruit fit for the gods, or, perhaps, a spray, broken from Aladdin's lantern. The mirror repeats this wonderful fruit cluster with very fine effect. And so our morning stroll ends, and tomorrow we go "to fresh fields and pastures new."

Acoustics of the Convention Hall.

THE arrangements for holding the musical festival in the Exposition building this year were more extensive and perfect than ever before attempted in Chicago. The management, profiting by the experience of the past, where these concerts had been partial failures, because of the lack of proper acoustic arrangements, engaged architects Adler and Sullivan with the view of making the hall, as far as the nature of the building would permit, perfect in this respect, as well as to seat the vast audience with ease and safety. The architects, realizing that it was useless to make the hall as extensive as heretofore, incorporated a section of the great building, 150 by 400 feet, and, by an ingenious arrangement of inclines, distributed the seats so that all gave a perfect view of the stage. The different aisles are reached by tunnels leading from doors marked and painted each in a peculiar color corresponding to the color of the tickets, so that no mistake can be made in seating the vast audience. The total number of seats, as reported to the Republican National Convention committee, is 9,180; while the seats for sale, exclusive of the chorus, orchestra, escorts, gallery, etc., number 6,827. But it is the acoustic arrangement that is most important, and at the concert was most noticeable. At either end were placed immense sounding boards, that above the singers being 120 by 150 feet, and so adjusted that the sound waves were kept down and swept out over the vast auditorium, while the immense amount of timber in the ceiling, so laid as to cut off all chance of speaking below and to take up the slightest sound, and coöperating with the sounding-boards, gave a pure, clear quality to the sound that made every word distinct. The effect was most clearly noticed by the audience when the words of the director, with his back to the audience, were often clearly heard when only intended for the ear of those nearest him. This wonderful triumph in acoustic science was noticed in the Republican convention, which also used this hall, showing that in the hands of experts a building can be made perfect in this respect.

Important Test of Flat Hollow-Tile Arches.

THE following record of tests made to determine the strength of hollow tile arches will be of interest to many of our readers:

The tests were made with the tiles of the Wight Fireproofing Company set in the first floor of the new Chamber of Commerce building. A section of floor measuring 14 by 17 feet was prepared for the occasion by finishing it with 2 by 3 inch strips laid over the same, imbedded in concrete 3 inches thick and covered with a pine floor 1¼ inches thick. This was loaded as follows: First, cases of dry goods from Marshall Field & Co's warehouse of aggregate weight of 1,350 pounds; second, a safe weighing 4,000 pounds, set directly upon the floor without the intervention of planks or any other distributing medium; next, timber weighing 2,700 pounds, making a total of eight thousand and fifty (8,050) pounds, almost all of which was, however, concentrated on one-half of the prepared space. The safe was then rolled to and fro, and the dry goods boxes raised to a height of four feet above the floor and repeatedly thrown down upon the floor. Careful observations made of the under side of the arches revealed no cracks or springs in any of the mortar joints.

The next test was made upon a piece of floor, the arches of which had not yet been covered with concrete. An area of 8 feet 2 inches by 5 feet 3 inches was covered with a bed of sand. Upon this were piled 3,096 bricks, weighing 13,158 pounds, making a load of 307 pounds per square foot. A safe weighing 4,000 pounds was then rolled back and forth past this brick pile, over planks bedded on sand. The sand had been removed from over the iron beams so that the weight of the safe was entirely over the arches. No appreciable effect was produced upon the arches.

These tests were made on the afternoon of Thursday, June 5, in the presence of Architect W. W. Boyington, the Building Committee of the Chamber of Commerce, Mr. John Pashley, Architect S. V. Shipman, Architect P. B. Wight and Architect D. Adler.

On the following day these tests were continued with a view to determining the ultimate strength of the arches: First a 6-inch arch of 3 feet 8 inch span and 2 feet long, the beams supporting held together by tie rods, was covered with a bed of sand and then loaded with 5,181 pounds of pig iron without producing any effect upon the arch. This was equivalent to a load of 706 pounds per square foot. It was impossible to continue this test to the breaking point of the arch because of the impracticability of handling more iron in the place where the test was being made.

The second test was made upon a 9-inch arch of 4 feet clear span. Upon an area of 3½ by 4 feet was made a bed of sand upon which were piled bricks up to a weight of 3,162 pounds in such a manner that none of the load came directly upon iron beams. Upon this brick was piled, 8,186 pounds of iron, making a total load of 11,347 pounds or 810 pounds per square foot of arch. As the supply of iron was then exhausted the continuance of the experiment to the destruction of the arch was postponed to a future day.

These last tests were made in the presence of Architect P. B. Wight, Architect D. Adler and the editor of this journal.

These are the first practical tests that have been made of the form of the flat arches made of fireproof hollow tile now in use and will be valuable to architects, especially in the construction of fireproof warehouses.

In the first two tests the arches were subjected to strains approximating as nearly as possible the heaviest usage floors can be subjected to in the ordinary case of warehouses. The last two experiments went farther than this and were intended to determine as nearly as possible the strain required to break down and destroy the arches.

As these tests were made under the supervision of those who rank among the first architectural authorities of the West, they are thoroughly reliable.

Our Illustrations.

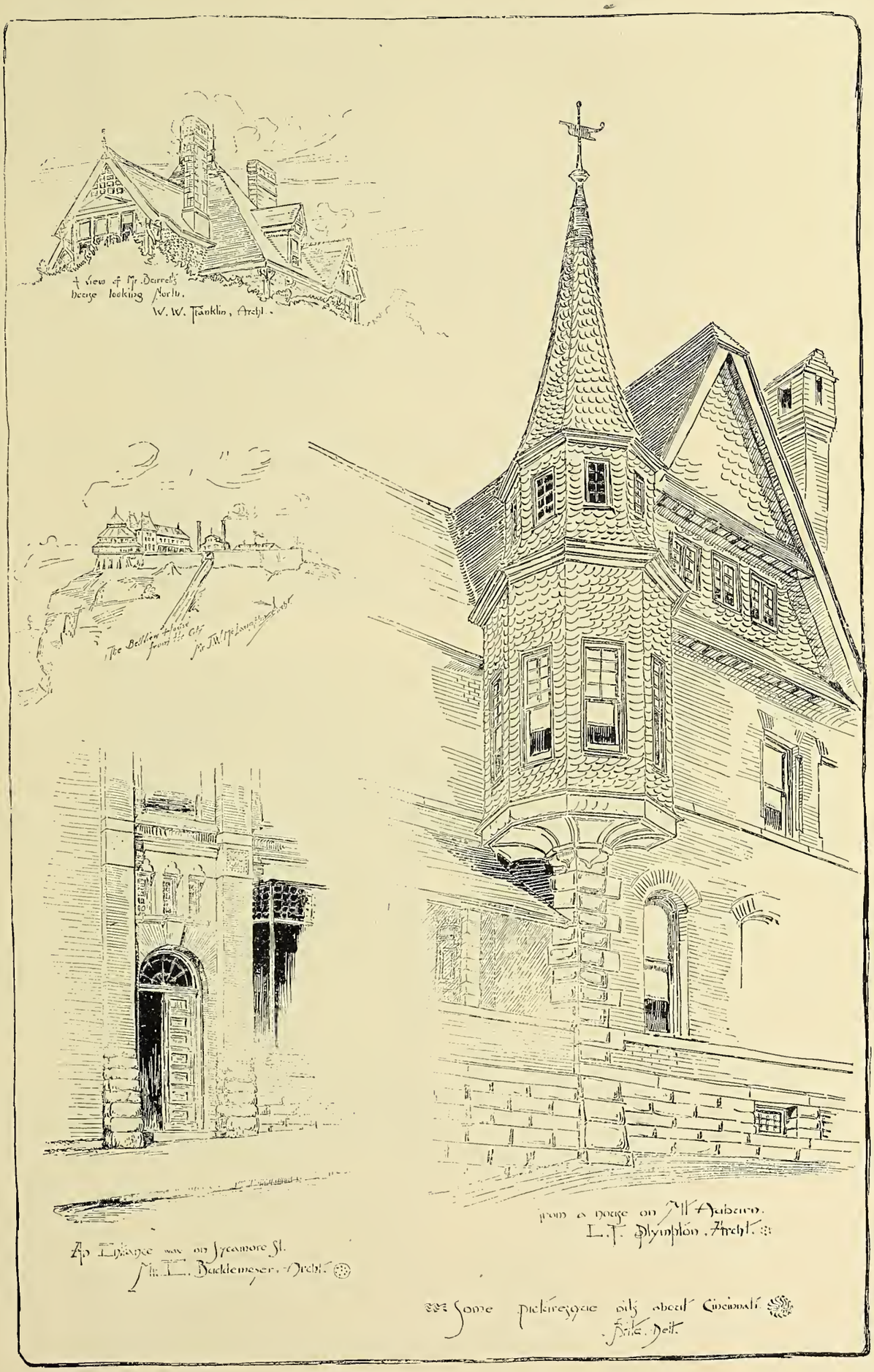
Page 65, fragments of Cincinnati architecture, a collection of bits and views gathered and sketched by James Brite.

Page 67, perspective view and plan of cottage by architect G. H. Blanden, of Springfield, Mass., and perspective view and plan of cottage by architect George W. Bird, Des Moines, Iowa.

The St. Paul Chamber of Commerce Building, by architects Carpenter & Teltz, a description of which was unavoidably omitted from the May issue, is 50 by 130 feet, six stories in height with basement. The construction will be of Chicago Anderson pressed brick, with granite and Frontenac stone trimmings. The style of design is Gothic Renaissance. The Chamber of Commerce has an appropriate meeting hall on the second story, and the rest of the building will be offices, excepting the first story, which is divided into stores. The basement is arranged for a restaurant. The construction of the building is in piers and large openings so that it is at once substantial and well lighted. The two principal stories have floors of iron filled in with brick arches to render them fireproof; all upper stories resting on iron girders, which act also as ties to strengthen the structure; the hall partitions are of brick and form fire walls to top of roof; stairways are of iron and all necessary precaution is taken to make the building as fireproof as possible. The building will be heated by steam and have Hale's improved hydraulic elevators. For general convenience and comfort the plans show all that could be desired. The total cost of the structure will be $100,000.

Supplement, front elevation and interior view of the Open Board of Trade building, Chicago, by architects Wheelock and Clay. The building has a frontage of 100 feet on Pacific avenue, a depth of 105 feet, and is six stories high. The front is of Anderson pressed brick, brown Northwestern terra cotta and brownstone. The first two stories of the main part are occupied by the Board of Trade room, which is a magnificent and well lighted hall entered directly from the street, the dimensions being 85 by 107 feet. There are iron columns supporting the upper floors and connected by arches. The finish of the walls is plaster, the center covered by a skylight 50 by 85 feet. Above the glass is a series of balconies, one on each floor, giving access to the offices above, of which there are some twenty on each floor, or eighty-three in all, the sizes ranging from 12 by 22 feet to 24 by 22 feet. There are two of Crane Bros. steam elevators reaching from a southerly arcade which passes from one end of the building to the other, and likely in coming time to connect the main building on Pacific avenue with a rear extension, the corporation having a lease of the whole ground running through to Clark street. This arcade will also be the means of connecting the trading room, if at any time it is required, with any of the adjacent buildings. Each office above is connected with the board-room with speaking tubes, and the elevators which reach the upper story are not only connected with this arcade, but they open immediately upon the board-room, making the offices very desirable for those who deal upon the board. The building is heated by steam, Baker, Smith & Co's systems of indirect and direct heating and ventilation being used. The court is covered by a large skylight (Hayes' patent), giving perfect light to the offices opening on the balconies. The design of the architects, to make this building not only perfectly adapted to the uses of the open board, but a model in arrangement for organizations of this character, is admirably carried out. The cost of the structure is about $150,000.

THE application of electricity to so many useful things is one of the wonderful features of a wonderful age. The manufacture, not to speak of the used, of apparatus and machinery for the use of electricity in the business of the world has grown within a year into an industrial interest of great magnitude. The Detroit Electrical Works, of Detroit, Michigan, for instance, employs eighty hands in the manufacture of electric bells, fire alarms, burglar alarms, hotel and house annunciators, electro-mercurial fire alarms, telegraph and telephone supplies, cashboy calls, etc.; all of which have become important auxiliaries in the transaction of business. Almost every day something new is added to the list of electric appliances, and the company above named is prepared to manufacture anything in this line. The reader who is as yet not fully informed concerning the utility of any of the articles mentioned should write to Mr. Wm. H. McKinlock, secretary of the Detroit Electrical Works, for descriptive circulars.


A view of Mr. Barrett's house looking North.
W. W. Franklin, Archt.
The Belfry tower from the East
for W. McLaughlin Esq.
An Entrance way on Sycamore St.
Mr. L. Baeldemeyer, Archt.
From a house on Mt. Auburn.
L. T. Plympton, Archt.
Some picturesque bits about Cincinnati
Brite, Delt.

California Redwood.

THERE has lately come to the Eastern lumber market a wood that for richness of color, the facility with which it can be worked, and on account of its durability, will become one of the most important species of lumber used in the construction of houses. This is the redwood of California. The tree has often been described, its gigantic growth being itself a marvel even to the lumberman who has felled the largest monarchs of our pine-tree forests. For many years the wood has been in common use in California, and its resistance to the effects of the weather there is remarkable; and though it has yet to be tested in this climate, there is no reason for doubt of its adaptability to all purposes of building here. In a beautifully illustrated and well written work on this subject published by the California Redwood Company, of San Francisco, a full description of the home of the redwood and the methods employed in preparing it for market is given; and when it is understood that the lumbermen consider trees of four feet diameter too small for cutting, some idea of the average size of these trees is obtained. As the freightage of lumber is at present considerable, the redwood must of necessity remain more expensive than common pine, but its fine grain and rich natural color will give it a value that will place it in the first rank of ornamental or finishing woods. Large quantities have already been used around Chicago for shingles and weather-boarding, while for trimming it has the color and polish of mahogany. It seems that the field of furniture manufacture would receive a valuable addition from this source, and indeed all workers in wood should examine and test the redwood for effects that can only now be surmised. The fact that it neither warps, shrinks nor checks, would seem to bear out this idea, and as the base of the tree works readily into a beautiful veneer it cannot long be ignored by furniture makers. The largest mills are located on Humboldt bay. The machinery used is made especially for this trade, the ordinary outfit of a Michigan or Wisconsin mill being equal to that of a match factory compared with the huge saws, carriages and derricks, the latter being absolutely necessary for the handling of the immense logs, some of them ten feet in diameter. This wood is said to be "practically fire-proof"; that is, it does not burn easily, so that the woodsman clears out the underbrush with fire which leaves the trees uninjured. It is important that architects should examine carefully into the merits of this beautiful wood and give to their clients the benefit of their investigations.

Lumber Notes.

Logs average $10 per 1000 feet at Stillwater, Minn.

The longevity of redwood railroad ties is said to be over eleven years.

In the United States there are 36 varieties of oak and thirty-four of pine.

Minneapolis has been receiving large amounts of lumber, the bulk of which came from Wisconsin.

Cullman county, Alabama, has nine new sawmills, which are turning out large quantities of lumber.

Hemlock is favorably considered for railroad ties, more for its property of holding spikes than for its durability.

The best of hickory used in the arts, where toughness is required, is obtained from North Carolina and East Tennessee.

Emile Desmit, of Moss Point, Miss., one of the largest lumber and mill owners in the South, failed recently for $400,000.

Lumber shipments from Milwaukee are reported to be in excess of three millions of feet per week; the receipts less than half that quantity.

Heavy rainstorms in the Northwest have raised many of the small streams to a stage that will enable the lumbermen to get out all of their logs.

All the indications are that there will be at least 300,000,000 feet of lumber consumed in Minneapolis and St. Paul, including the space intervening, during the year 1884.

Work on the great union depot in Minneapolis is being commenced in earnest this week. It will be one of the finest depots west of Chicago. The great viaduct is complete and all approaches done.

Several hardwoods are gradually coming into use which, a few years ago, were never used for finishing. Beech is one of them, which is being used considerably for school and church furniture.

The extent of the operations of the Ontonagon Diamond Match Company may be partially understood when it is realized that that concern harvested about 30,000,000 feet of logs at their camps during the winter just closed.

The *Southern Lumberman* says that the lumber business in the South is satisfactory; no serious depression at any point, while at some places it verges upon a boom, and but little speculative feeling exhibited, except in the matter of Southern timbered lands.

Some time ago a pine-tree in Chester county, South Carolina, was blown down. One limb of it was sawed up, and turned out four hundred and seventy feet of lumber. The but end of the tree was so large that it could not be moved by a team of six mules.

A bill to permit the erection of a dam across the Mississippi at St. Cloud has passed the House and is now before the Senate without objection. By the erection of this dam it is expected that an enormous water-power will be ereated at East St. Cloud and a grand lumber manufacturing center be built up soon.

The lumbermen of Duluth have commenced improving the St. Louis river from Thompson to Oneota, over the great falls of the river. A large force is at work blasting, and building wing dams to facilitate log driving. It is said to be one of the heaviest pieces of stream improving ever indulged in anywhere, and will cost a very large sum of money.

Sawdust as a substitute for sand in mortar for house-plastering is attracting considerable attention. It is elaimed that mortar made of sawdust is more porous than the ordinary kind, and consequently the face of the wall composed of it is warmer; that it is a non-conductor of sound and dampness, and that it overcomes the echo in churches and halls.

The millmen of the Chippewa river, after spending a mint of money in planing-mills, piling grounds, etc., with the purpose of shipping over the railroads, have, because of a change of railroad policy, deeided to resume rafting, and it is estimated that the amount of lumber thus rafted to and distributed from points below Davenport will not be far from 200,000,000 feet. This will no doubt benefit the price of lumber in the Northwest, as it will leave that market and come into competition with that of Chicago, and will again revive the planing-mill industry that suffered through the deflection three years ago.

The New Orleans correspondent of the *Lumber Trade Journal*, referring to the contemplated Exposition at New Orleans, says: "I know of no exhibit from the South that will so clearly show one of its vast resources than that of its forest products. Lumbermen have begun selecting samples for exhibition. For size of trees, peculiarities of grain, and different varieties of timber, the exhibition promises to be well worthy of examination, and it is trusted that the effects on the many lumbermen of your section who are expected to visit us will influence at no late day the introduction of Western energy, skill and enterprise in the development of the lumber industries of this section."

A correspondent of the *Southern Lumberman* writes: "I have made mention heretofore of the fine poplar, ash, oak and hickory on the mountain benches from Cumberland Gap to the Tennessee river, and would like now to call attention to some other trees that grow in great abundance here that are not generally quoted in the lumber markets. First among these is the cucumber-tree, that grows plentifully and to enormous size. The wood resembles, in some respects, yellow poplar, but after being seasoned shrinks and swells less on exposure to the weather than any other. It is partieularly adapted for wooden pumps, works easily, and is durable. It will also make excellent box-boards and siding; and I see no reason why it should not supersede poplar for ceiling, etc. It can be found in sufficient quantities to make it an object, should the demands of the trade require it."

Architectural and Building Notes.

The new cotton factory at Summerdale, Lake View, will soon be completed, and will give employment to about 300 men.

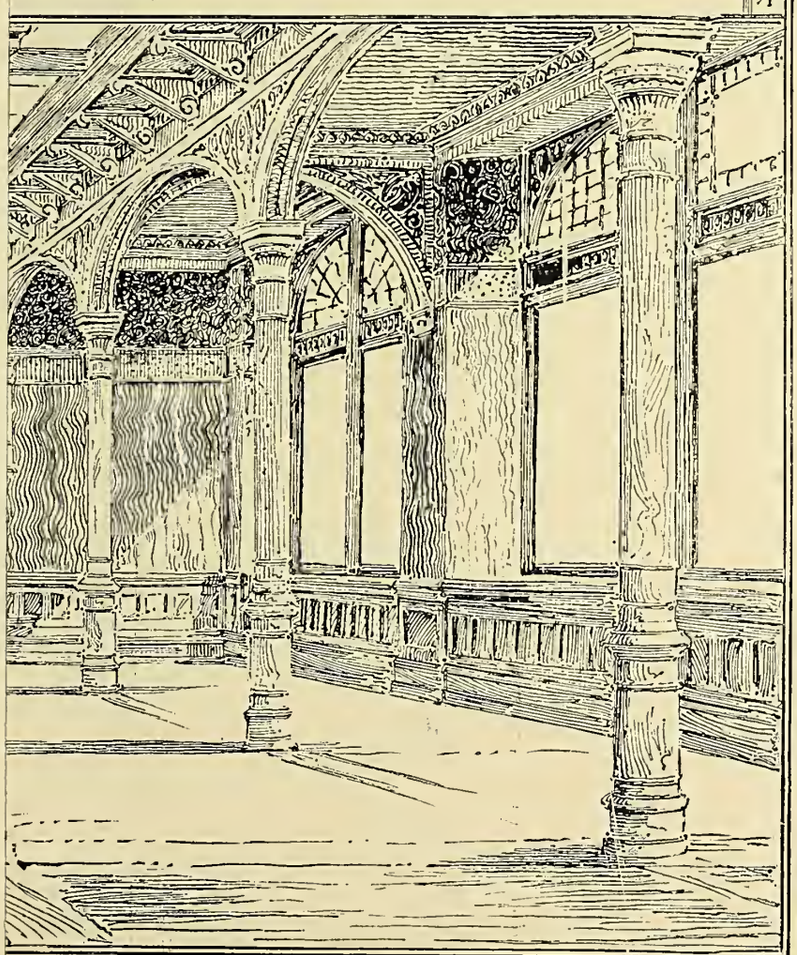
Architect W. A. Furber has prepared plans for the McNeil office building, which will be a thoroughly fireproof structure, built of pressed brick and terra-cotta ornamentation. It will be nine stories and basement in height, located opposite the Grand Pacific, fifty feet facing on Clark street and 214 on Jackson. The cost will be about $200,000. At present there is an uncertainty how soon it will be erected.

The first meeting of the Indiana Chapter of A. I. A. was held last month, at which officers were elected, and constitution and by laws adopted. The chapter numbers nine members: E. J. Hodgson, C. A. Wallingford, J. H. and A. H. Stem, of Indianapolis, J. W. Reid, Evansville, and Charles Eppinghausen, Terre Haute, All Fellows and B. H. Enos, Chas. Muller and F. A. Voydes, of Indianapolis, Associates. Mr. Wallingford was elected president.

The panorama of the Battle of Gettysburg, open daily from 7:30 o'clock in the morning until 11 o'clock in the evening, has during the past month been constantly crowded with visitors, the Musical Festival, Convention, Decoration Day, etc., bringing large numbers of visitors to the city. The peculiar form of the building always excites inquiry, and the fame of the great work of art it contains has made it the most attractive feature to the sightseer in the whole city. The building is a credit to the architects, Messrs. Bauer & Hill, and is thoroughly safe and convenient. Electric lights are used, which, beside the superior quality of light produced, renders the building absolutely safe from fire.

Architects Adler & Sullivan are preparing plans for a six-story store building for Martin Ryerson. The building will stand on one of the best lots now vacant on the south side. It is 701 by 70, fronting on Randolph street and cornering on the alley between State and Washington streets opposite the Central Music Hall. The front will be of brown stone and the lighting will be exceptionally perfect, and the building, besides receiving light from three sides, will have large windows. As is Mr. Ryerson's well known custom, this building will lack in no essential to make it a perfectly substantial structure. This firm is also preparing to construct for A. F. Troescher, of New York, a store building on the east side of Market street, between Madison and Monroe. It will be six stories and basement in height, 80 by 90 feet. The walls will be of brown stone, pressed brick and terra cotta. These architects have in hand a theatre building for Jonathan Clark, the prominent contractor, that, though not large, will contain some wholly new and admirable features. The walls and proscenium arch will be of brick, and wire lath will be largely used. The galleries are so arranged as to dispense with all the objectionable iron supports which interrupt the line of sight. The arrangement of boxes and balcony is such as to admit of a perfect view of the stage from all points, while the acoustic properties receive special attention. The front of the theatre is arranged for a general parlor, ladies' parlor and dressing-rooms. The entrances to the gallery are on either side of the front, with no connection with the main part of the house. While not entirely fireproof, the arrangement of this theatre promises reasonable safety and comfort to audiences.





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CHICAGO OPEN BOARD OF TRADE.

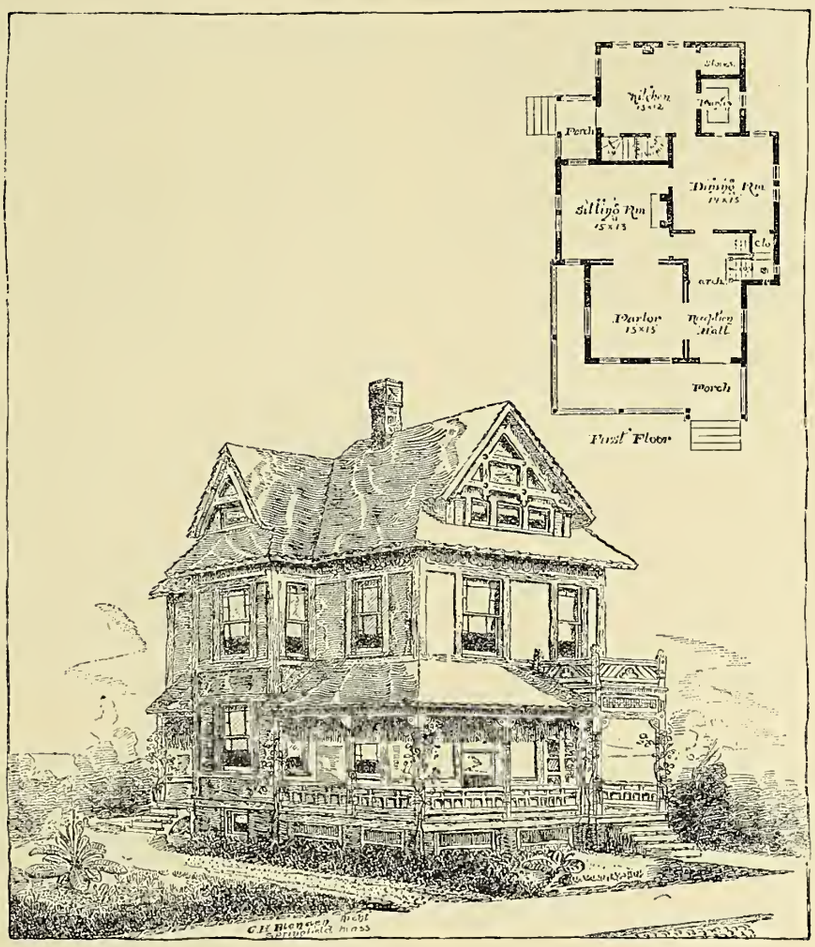
WHELLOCK & CLAY, ARCHITECTS.

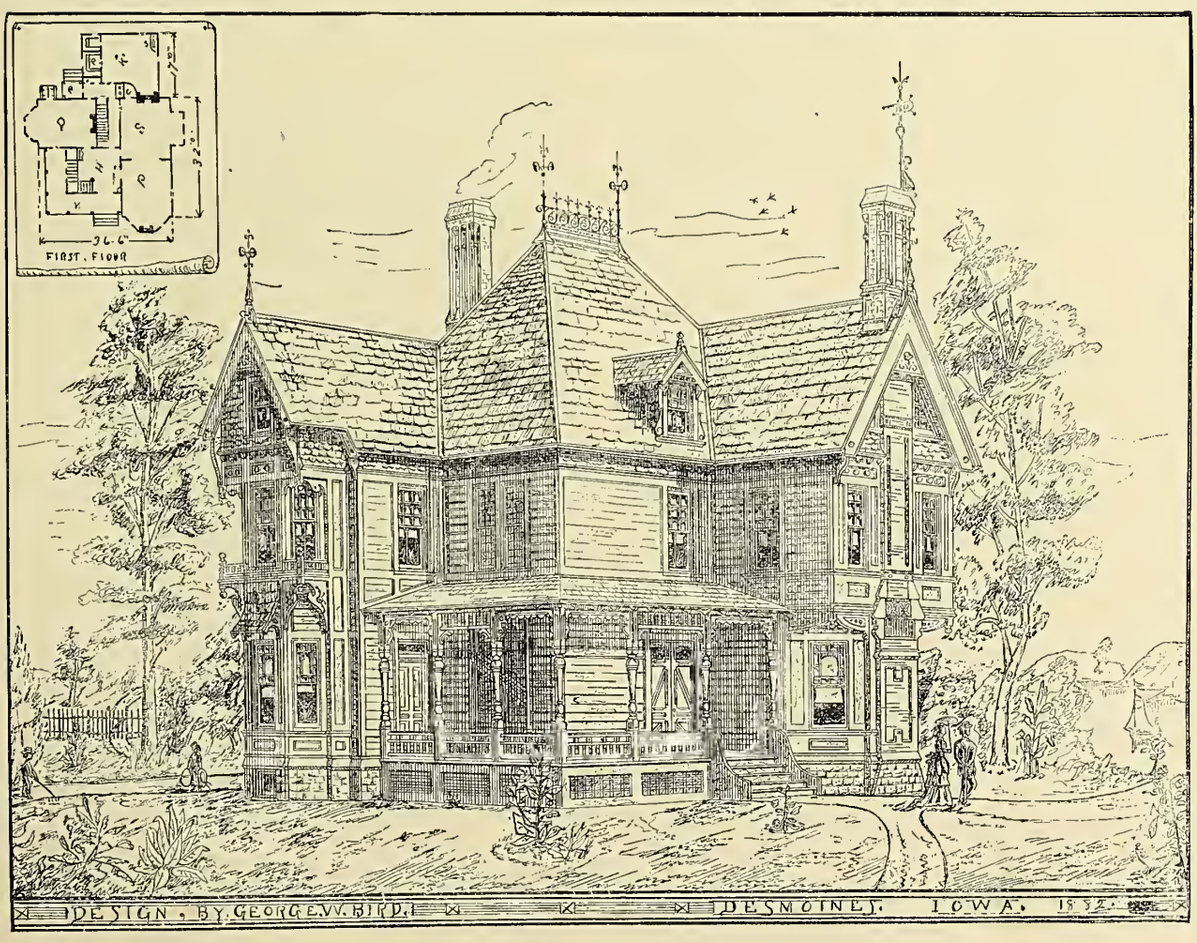


Paul C. Lautrup, Del.

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Kitchen
Porch
Sitting Rm
Dining Rm
Parlor
Reception Hall
Porch
First Floor


FIRST. FLOOR
DESIGN. BY. GEORGE. W. BIRD.
DES MOINES. IOWA. 1882.

Mosaics.

Mr. William Hayden (late with A. H. Andrews & Co.) has opened a store of office furniture and fittings at 193 Wabash avenue, and is the sole agent in the West for the celebrated "Cutler" desk.

A magazine base-burning boiler that is fast coming into prominence because of its scientific construction and practical utility is called the "Champion." It is especially adapted to heating houses, and is made entirely of wrought iron. It is easily controlled and its tubes are arranged so as to be easily accessible. Baker, Smith & Co., Chicago, are the manufacturers.

Architects looking for veneers will find them exhibited in many varieties and applied in many different ways at 52 La Salle street, where the Western agency of Spurr's patent papered veneers is located. The process of spreading the veneer on paper, and applying it effectually to the finest moulding, cornice or wall, is worthy of examination, as it evidently has many points of superiority over other veneers.

A large number of prominent buildings erected in New York, Boston and Philadelphia during the past seven years, besides a number of prominent buildings in Albany, N. Y., and Cleveland, O., have used the patent concrete illuminating tiling, to say nothing of its use in many buildings in this city. As a tiling for covering all openings in sidewalks, or for floor, roof or sky lights, or for any purpose where an illuminating tiling may be required, it certainly occupies a foremost and deservedly prominent place. It is durable and pleasant to the eye, and has stood the most severe tests. The main office of the company is 24 Lakeside Building, Chicago, Ill.

The propriety of using Roman and Venetian marble tiles is being brought to the notice of Chicago architects by Messrs. Carretti & Hogan. Some excellent samples of each style of work is shown, made from imported marbles, the plain mosaic work of the Roman method of floor tiling and the brighter-colored marbles of the Venetian, for wall-panel, mantel, hearth or ceiling decoration, show that this work is produced not as an imitation but a true reproduction of the lasting mosaics found in Italian architecture. The selection of marbles was made in Italy, and though costly their adaptability to special designs, together with their beauty and permanency, will lead to their use in the better class of public and private buildings.

The demand for ironwork for buildings has so rapidly increased in the West that new firms are being constantly organized, and those long in the business are obliged to materially increase their facilities. One of the oldest and most creditably known, located in Chicago, is that of Clark, Raffen & Co. They have recently built a four-story brick building, 50 by 70 feet, to be used as a machine, fitting, blacksmith and pattern shop, and also contain the offices, and the old foundry adjoining has been torn down and a new foundry building, 100 by 100, takes its place. Their facilities for the production of all descriptions of wrought or cast iron material for building construction are of the best, and their capacity ample for supplying their large trade.

The following circular letter will be of interest to those interested in the fireproofing of buildings:

We take pleasure in notifying the architectural profession, our patrons and friends, that we have removed our office from No. 32 Metropolitan Block to our Fireproof Office Building, No. 1545 Clark, corner of Sixteenth street, and desire to call the attention of all interested to the fact that we are now better prepared to transact business with dispatch than we have ever been before. Our new location will afford us increased facilities for handling our material, as we intend to keep our yard stored with a stock of various sizes of tile; having a special railroad switch into our premises, we shall be able to receive and ship material without any delays. Within the past thirty days we have doubled the capacity of our factory at Ottawa, Illinois, by erecting new buildings, machinery and kilns, and feel confident that we can fill all orders and complete all contracts that may be entrusted to us with satisfaction and dispatch. We solicit a continuance of past favors, and ask a personal inspection of our new office building, which we have erected entirely of Hollow Tile, as an evidence of the value of this material in the construction and fireproofing of buildings.

Pioneer Fireproof Construction Company,
By E. V. Johnson, General Manager.

Personal Notes.

Paul C. Lautrup, the popular architectural designer, has removed to room 96, Ashland Block.

The Real-Estate and Renting Agent's Association gave an exceedingly pleasant inaugural lunch recently to celebrate the opening of their new rooms at 159 and 161 La Salle street, when nearly one hundred members and guests assembled. The noon-call meeting, which was suspended during the alterations, has been resumed.

Architects E. J. Hodgson, C. A. Wallingford and J. H. and A. H. Stem, of Indianapolis, Ind., have entered into copartnership, thus forming one of the strongest firms of the kind in the West. Their rooms are said to be very spacious, elegant and complete. Their business embraces a large number of fine buildings in nearly every state of the Union.

Architect Harry Lawrie has had plans for his estate of matrimony drawn for several years, the general details having been arranged before leaving his native country, Scotland; Miss Ellen Webster acting the part of consulting architect on that occasion. Last week the interested parties met, and decided to begin carrying out the plans at once, and in the presence of the Rev. J. H. Worcester, of the Sixth Presbyterian church, the contract was signed. Plans that have received the mature consideration of three years, and that were so important as to draw the interested parties from one country to another, must now surely be carried out successfully and prove a lasting joy to the architects. May their completion prove them infinitely more satisfactory than the most beautifully drawn perspective.

In the death of architect William M Crosbie, at Cleveland, Ohio, on the 1st inst., the profession loses one of its most promising representatives. Mr. Crosbie moved from Atlanta, Canada, to Cleveland about six years ago, and although but twenty-seven years of age at the time of his death, had attained considerable celebrity as an architectural sculptor and designer. He has left, on some of the finest buildings in various cities of the North and Northwest, many evidences of his artistic abilities. Among the buildings which illustrate his skill as sculptor and designer are the Lake Shore & Michigan Southern railroad building, and Nickel Plate depot in Cleveland, the new city buildings at Winnipeg, Manitoba, and fine business blocks in Buffalo, Pittsburgh and other cities. He was engaged on some fine buildings when fatally prostrated by typhoid fever.

Correspondence.

Des Moines, Iowa, May 23, 1884.

To the Editor of the Inland Architect and Builder:

You may be interested to learn of the formation in this city of "The Architectural Association of Des Moines." Its regular meetings occur fortnightly. Its active membership is composed of practicing architects. Draughtsmen may join as associates, with all privileges except voting and holding office. The annual fee required of associates is to be used in procuring periodicals for the benefit of all. By recording their names on the list of the association's guests, engineers and others become honorary members.

The officers are: Pres., J. S. Blake; Sec. and Treas., E. H. Taylor.

As expressed in the constitution, the object of the association comprehends the broad field of "uniting all directly or indirectly interested in architecture; mutual improvement; elevating the standard and increasing the usefulness of architecture; disseminating and perfecting architectural knowledge and correcting unprofessional practices."

Respectfully, E. H. Taylor, Sec'y.

We congratulate the architects of Des Moines upon this action, indicating as it does the advanced stage of the profession in Iowa. The broad spirit shown in making their association the center of all classes interested in the art of construction is also most commendable, as they make exclusion begin only where it should, where the action of applicants is unprofessional. We expect much, hope much from this association, both in its effect on Iowa architecture and in setting so good an example to the profession generally.—[Ed.

New Publications.

HINTS AND PRACTICAL INFORMATION FOR CABINET-MAKERS, UPHOLSTERERS AND FURNITURE MEN GENERALLY, together with a description of all kinds of finishing, with full directions therefor, varnishes, polishes, stains for wood, dyes for wood, gilding and silvering, receipts for the factory, lacquers, metals, marbles, etc., pictures, engravings, etc., miscellaneous. Published by the Industrial Publication Company, New York, 1884.

This book (of which the price is not stated), contains 128 pages of practical hints, suggestions and directions for use in the furniture shop, and should be an invaluable handbook to the worker in finished woods. The compiler begins with constructive cabinetmaking, and from practical remarks and designs for cabinet work, framing, veneering, etc., he procceds to the many different departments of varnishing, filling, giving special directions for handling different woods, giving special directions how to mix the different varnishes, and, in fact, the work is full of valuable hints.

OUR HOMES, HOW TO HEAT AND VENTILATE THEM. Published by the Smith & Anthony Stove Company, 52 and 54 Union street, Boston, Mass.

This elegant little pamphlet volume goes beyond the province of trade circulars, and clearly and intelligently discusses the subject of heating and ventilation from a sanitary standpoint, showing the necessity of houses being supplied with air with all the purity and freshness of that of a south wind in springtime, and that by apparatus that can be effectually controlled. It also shows how intimate are the relations between heating and ventilation, and that aside from the hygienic, the phase of perfect utility is one of the important components of a perfectly heated apartment, and that the success or failure of apparatus depends largely upon the knowledge of the manufacturer upon this point. The book is well written and typographically creditable, frequent illustrations of residences giving a pleasing variety to the pages and apt description of the text. The pamphlet is a valuable addition to trade literature, and should be examined by those in search of information upon the subject of heating.

Inventive Genius in Building.

297,449. Fire-proof Building. Gustavus W. Rader, New York, N. Y.
297,465. Door-Securer. Wm. Starrett, North Manchester, Ind.
297,485. Lumber-Rack. Joseph Amis Aycock, Whitesburg, Ga.
297,491. Constructing and Fastening Tiles. Walter Booth, Tarrytown, N. Y.
297,499–500. Fastening for Meeting-Rails of Sashes. Louis J. Church, Washington, D. C.
297,530. Metallic Shingle. John Mott, New York, N. Y.
298,347. Compound Water-cock and Sewer-gas Cut-off. William Cahoon, Jr., Chicago, Ill.
298,405. Derrick. Adam Reitz, St. Louis, Mo.
298,417. Sandstone-Crandall. Ferdinand Shueddig, St. Louis, Mo.
298,418. Manufacture of Bricks made of Glass. Francis H. Shaw, Newark, N. J.
298,452. Cistern for Water-closets. John Demarest, New York, N. Y.
298,463. Roofing-bracket. Alfred Guedle, Canal Dover, O.
298,522. Cold and Fireproof Storage Building. Benjamin E. Valentine, Brooklyn, N. Y.
298,528. Lathe for Turning Polygonal Forms. Ludwig Weisse, New York, N. Y.
298,580. Machine for Casting Plumbers' Traps. Charles E. Heiss, Chicago, Ill.
298,757. Fireproof Fabric. Henry W. Johns, New York, N. Y.
298,790. Portable Building. Joseph Sanford Simmons and Robert Marion Simmons, Belton, S. C.
298,791. Builders' Scaffolding. Daniel W. Spooner, Minneapolis, Minn.
298,804. Adjustable Support for Watercloset Basins. Henry Cory Weeden, Boston, Mass.
298,805. Flushing-Apparatus for Closets and Urinals. Henry C. Weeden, Boston, Mass.
298,834. Draughtsman's Adjustable Curve Ruler. Frank Winthrop Davenport, Providence, R. I.
298,850. Tile-Machine. Francis M., Maxwell G., Milo J. and Marcus L. Harris, Covington, Ind.
298,860. Blind-slat Operator. William H. Keeran, Auburn, Ind.
298,888. Border-Light for Theatres. John T. Preddey, Carson, Nev.
298,921. Decorative Tile. Savillion Van Campen, Jersey City, N. J.
298,970. Eaves-Trough Hanger. Henry John Hoepfner, Athens, O.

Synopsis of Building News.

Atchison, Kan.—Architect H. B. Prudden reports the outlook good, and in addition to a large amount of small work in his office, plans for the following just finished or under way: For Hon. James N. Burnes, M.C., hotel, four stories, brick, tin roof, 100 by 150 feet, cost $40,000; First National Bank, three stories, cut stone, tin roof, tile floors, 25 by 90 feet, cost not yet known; Crookham & Nealey, contractors. Mayor C. C. Burnes, store building, two stories, pressed brick and cut stone, 45 by 150 feet, cost $10,000; Henry Luth, contractor. Hon. H. P. Waggener, residence, cut stone, slate roof, 50 by 72 feet, cost $30,000. D. E. Farnesworth, two-story frame residence, 30 by 45 feet, cost $4,000; John F. Wright, contractor. John Brown, two-story brick residence, 28 by 40 feet, cost $2,500; Jacob Spatz, contractor. Dr. Shulze, two-story frame residence, 32 by 52 feet; John T. Wright, contractor. Frank Howard, two-story and attic brick residence, 34 by 50 feet; cost $4,700; John T. Wright, contractor. Chas. E. Styles, two-story brick and stone residence, 40 by 46 feet; cost $5,200; John T. Wright, contractor. David Sear, two-story brick residence, 40 by 58 feet; contract not let above foundation. J. C. Fox, two-story and basement, 45 by 60 feet; projected.

Buffalo, N. Y.—The Builders' Association having declined to raise the wages of stone-masons and bricklayers from $3 to $3.50 per day, as demanded by the Union, five hundred men refused to go to work on the morning of the 26th ult. At a meeting of the builders it was decided to firmly oppose the strike. In view of the Wall-street excitement, it was thought money would be close, and the fact that there was comparatively little building and the difficulty experienced by many of the members in finding work for the men in their employ, they considered $3 a day was full enough pay for stonemasons and bricklayers. The members of the Union who are out of work are to receive $7 a week each, pending their return to labor; but while their Union (No. 36) is said to be one of the strongest in the country, with $4,000 in its treasury, the indications are that its members will have to live on $7 a week a long time—much longer than the $4,000 will last—if they refuse to work until the builders accede to their demand.

Chicago, Ill.—The building season is so far advanced that definite statement can be made of the situation. There is to all appearances more building in progress than during the year previous, though there are now signs of a falling off in projected building. Last year several months were lost in the spring through the strike of bricklayers, and as a consequence much building was left over or indefinitely laid asidc. This year all went well until a month ago, when the failure of some dishonest speculators in New York affected the confidence of capitalists; and though slight, its influence can be seen in the falling off in the architects' offices, though not as yet in the list of building permits. It would not be surprising if the building interest would be affected by the presidential contest, almost all forms of business being affccted last week by the presence of the convention.

There have been no buildings of extraordinary size projected during the past month that have any certainty of completion, aside from those noted in previous issues, except a large factory building for Bidler Bros. by architect J. J. Flanders, to cost $150,000; the McNeil office building by architect W. A. Furbcr, to be erected on the corner of Clark and Jackson streets, to cost $200,000; the immcdiate erection of the Durand office building, plans of which were prepared by architect Randolph some months ago, and the Ryerson building, which will equal those already erected for that gentleman from plans by architects Adler and Sullivan, the cost of which will probably be considerably over $100,000.

In looking over the building field, it is apparent that the building of small cottages in the outskirts is on the increase. They are built by large real-estate firms and are readily sold before they are completed.

In accordance with the move noted some months ago, West Madison street is undcrgoing a rapid change. Within two weeks as many as twenty frame buildings have been torn down or removed to make room for substantial buildings, and the time is near when the old frame buildings will all vanish and the street present a vastly improved appearance.

The tearing up of streets continues for paving, laying gas-pipes and telegraph cables. The Mutual Union Telegraph have applied for a permit to place their wires under the streets, and it is said that this is done by the Western Union Company, but that they fear to make the move in their own name, fearing that other cities will oblige them to go under ground also. It is beginning to be a matter of regret by all interested, as well as the public, that large sewers were not built years ago for the accommodation of these "underground interests."

At a recent meeting of the Board of Real Estate Managers of the Board of Trade building, all the members present, it was decided to reject all bids offered for putting in the stained glass in the skylight of the new building.

Architects Adler and Sullivan are very busy with plans which cover almost all classes of building, but many are not in a condition to report. Besides the Ryerson building noted elsewhere, they have plans for a factory building for Scoville & Towne. It will be five-stories, 175 by 150, constructed of brick and iron, with solid wood floors. The arrangement of plans will admit over sixty-five per cent of light. Also plans of a factory building, running through from Third avenue to Dearborn street near Van Buren, for B. & S. Shoeneman, 50 by 70 feet, five stories high. The construction will be brick and iron. Also the following residences: For R. Robel, two-story and mansard, Greenstone pressed brick and terra cotta, to cost $18,000. For Mrs. Anna McCormick, on Michigan avenue near Eighteenth street, two-stories, basement and mansard, 25 feet front, brownstone, pressed brick and terra cotta, cost $12,000. For Mr. Straus, on Wabash avenue near Twenty-fourth street, a double house, three stories and mansard, 42 feet front, brownstone and pressed brick, cost $20,000.

Architects Saxe and Barfield are building a three-story brick residence at 251 South Halsted street for Mr. Scholza, 66 by 25, cost about $7,000. Also three suburban residences, one for Mr. Farley and two for Q. Ball. The style of architecture is Queen Anne. They are each 32 feet wide and 52 feet deep, and are nicely finished. Also plans for a brick residence for supervisor John McNeal, in Lake View, for about $8,000. Plans also in preparation for a private residence for Mr. Goodwillie, which will cost $6,000.

Architect Schock is building a house for Geo. M. Davis at Austin. It is Colonial in style and has created considerable attention, various people visiting it each day, there being many novel features. It is three stories, with a cellar, Artesian-well stone in the basement, the upper part is stone, cost will be about $7,500. Also have in progress plans for a house for J. J. Walser, cost about $5,000. Also one for W. F. Haywood, three stories, built of brick, stone and terra-cotta ornamentation in the Colonial style, cost about $4,000, to be built at Rogers Park. Also making plans for J. H. Gilman at Ottawa, Ill., for a frame house, 48 by 48, three stories high, Queen Anne in style, cost $5,500. Also alterations for W. H. Hintz, of Elgin, Ill. Also remodeling the Purington block, which will be changed in the Grand Union Hotel. They are going to add two more stories and put in all modern improvements, and make it a first-class hotel of about 200 rooms; the improvement will cost about $50,000; the building is owned by Wm. B. Giles. Also at Austin, the Masonic Hall clubrooms and Park Hotel for Mr. Giles. The walls are of pressed brick with stores underneath, seven stories high, cost $20,000. Also a residence in progress for Wm. B. Baker, on the northeast corner of Prairie avenue and Gano street, 32 by 60, cellars and three stories, built of brownstone and Trenton pressed brick, cost about $13,000. Also an addition and alterations on H. L. Dahl's residence on La Salle avenue near north avenue, costing $1,200. Also a house in progress on Warren avenue between Leavitt street and Oakley, two stories and basement, pressed brick front, 21 by 42, cost $4,200.

Architect J. M. Van Osdel has under construction for Henry Memory, on the southeast corner of Pacific avenue and Van Buren street, an office building 30 by 100 feet, six stories and basement, trimmed with Wyoming Valley bluestone, to cost $60,000. Also the following: A factory on the corner of Pearson and Wells streets for the American Meter Co., 50 by 75 feet, two stories and basement, to cost $8,000; for George D. Drake, on West Jackson street, near Laughlin, a brick dwelling-house, 25 by 50 feet, three stories and basement, to cost $8,000; for John Sollitt, on West Jackson street, near Laughlin; a dwelling-house, 27 by 68 feet, two stories, mansard roof and basement, to be of Anderson pressed brick, trimmed with McArthur brownstone, to cost about $12,000; a flat for Victor Walter, 25 by 65 feet, three stories and basement of pressed brick with brownstone trimmings, to cost about $7,500; for Dr. Brown, on northwest corner of Madison and Canal streets, a building 60 by 66 feet, six stories and basement, to be of St. Louis pressed brick, trimmed with Bedford stone, to cost $42,000; two houses for Mr. Maynard, on the corner of Adams street and Oakley, each three stories and basement, 18 by 65 feet, of Indiana pressed brick and brownstone trimmings, to cost $6,500 each; for C. P. Carter, on the corner of Thirty-first street and Prairie avenue, a block of buildings, 74 by 137 feet, three stories and basement, to cost $45,000. He is finishing, also, the Parker building on Sherman street, which will cost $100,000.

Architect Jean A. Wierzbieniec is building on West Monroe street, near Throop, for Mr. A. Plamondon, a two-story double residence, 50 by 76 feet, with Lamont stone front, porticos and granite columns capped with marble, hip roof covered with slate, interior finish of hardwood, with gault and bronze trimmings, to cost about $25,000; also for J. H. Ward, a building 60 by 90 feet, three-story flats, pressed brick and stone trimmings, to cost about $20,000; and for J. Johnson, on Milwaukee avenue, one 45 by 75 feet, stone front, four stories, for stores and flats, to cost about $18,000.

Architect Miller is building four houses for Alburn and Hurbert on Park avenuc, 75 feet front, two stories high and cellar, stone fronts, and will cost about $25,000. Also a flat of buildings on Leavitt street, for Mrs. Prewett, of Anderson pressed brick, moulded and ornamental front, cost about $6,000. Also a house for W. E. Burt, on the corner of Monroe and Lincoln streets, Queen Anne style, sharp roof, pressed brick front, 48 feet front, by about 70 deep, three stories and basement, $22,000. Also for S. Wise, two houses, 37 feet front, two stories high and cellar, built of pressed brick, stone trimmings and very handsome, cost about $10,000.

Architect T. V. Wadskier has planned for R. W. Prendergast a $7,000 dwelling at 7 Boston street. For the Chicago West Division Railway Company, $40,000 brick stables have been planned at Ogden and Oakley avenues. Also plans for a large store on the corner of Market and Adams streets, for C. A. Blair and C. M. Henderson. It will be built of Anderson pressed brick, with brownstone trimmings. It is six stories and basement, 96 by 123, with the exception of about 50 feet, which is about 170 feet deep, and will cost about $160,000 to $165,000. It will contain all the modern improvements.

Architect S. S. Beman is building three houses on Michigan avenue near Sixteenth street, for Addison Ballard. They are 18 by about 80 feet deep, three stories and attic and basement, built of pressed brick and brownstone. The principal fcatures of these houses is a large hall in the center and large galleries around it. A large dome or cupola in the center lights the hall, cost about $30,000. Also residence for Mr. Morrison next to above-mentioned houses, built of pressed brick and brownstone trimmings, about 22 by 70, two stories and attic, cost about $12,000. Also for Wm. H. Murray, on Prairie avenue near Nineteenth street, 35 by 70, of Philadelphia brick and brownstone, three stories and basement, cost $32,000. Also the plans for Rosalie Music Hall, for the Rosalie Music Company at South Park, are prepared. It will be 60 by 100, two stories. First story of brick. The upper part will be constructed of timber, Colonial style. The building will be quite picturesque and will contain stores underneath. Also eight houses at South Park, ranging from $3,000 to $10,000.

Architect P. J. Pierce has reconstructed the store interior for C. Jevne & Co., recently burned out. The interior of the store, it is said, will be the finest west of New York. It is a large double store on Madison between Clark and Dearborn streets, and is handsomcly fitted up with oak and cherry fixtures, and contains large mirrors on either side, which line the walls for a distance with French plate-glass. The store contains separate apartments neatly arranged, there being one allotted for cigars, one for butter, for coffees, as well as wines, etc. Also ten houses commenced some time since for the National Life Insurance Company, of Maine, are under process of construction, and approaching completion, on the corner of Vincennes avenue and Oak street.

Architects Bauer and Hill are building a $60,000 block of seven stores and twelve flats. The front on Thirty-first street will be 118 feet, on Cottage Grove avenue, 97 feet. The fronts will be of Anderson pressed brick, with brownstone for the base and Burlington stone trimmings for the upper part, and terra-cotta panels. Also several other buildings in contemplation.

Architect Harry Firth is building a brick building, 110 by 60, for the Metropolitan Gas Co., on Forty-second street, near the lake. Although it is built rather cheap, it is a handsome structure, cost about $30,000. Other buildings in contemplation.

Architect H. Rehwoldt reports, for H. Wedemcyer, three-story double flats, brownstone front, 40 by 80 feet, cost $23,070, nearly finished, J. Walter, contractor; E. Jaeger, onc-and-a-half-story frame cottage, 25 by 56 feet, cost $4,000, nearly finished, J. H. Muller, contractor; Dr. W. Doepp, three-story stores with flats, brick front, 30 by 90 feet, cost $19,000; Cook & McLain, four-story storcs with flats, brick, 50 by 61 feet, cost $22,000, A. A. Stevens & Co., contractors; W. Reilley, two-story addition, brick, 23 by 40 feet, cost $3,500, T. White, contractor; Ed. Fitzgibbon, three-story brick store with flats, 24 by 76 feet, cost $8,000, G. Lchman, contractor; W. H. Davis, six dwellings, brick, each 98.6 by 59 feet, cost $27,000, A. A. Stevens & Co., contractors; Jos. Davoll, onc-and-a-half-story frame cottage, 27 hy 45 fect, cost $5,000; Dav. Wylie, three-story warehouse, 100 by 150 feet, cost $15,000, G. Schmidt, contractor; P. McLaughlin, three-story brick dwelling, 22 by 70 feet, cost $5,000; N. Davis, three-story brick addition, 34 by 80 feet, cost $7,500, W. Pound, contractor; Aug. Wadrich, three-story brick store with flats, 23.6 by 86 feet, cost $7.000, Ch. Gulzow, contractor; Ed. Marlow, three two-story brick dwellings, each 22 by 44 feet, cost $6,500, G. Kessler, contractor; Otto Dessauer, frame cottage, 32 by 50 feet, cost $3,100, Albert Schneider, contractor; H. Welge, barn, 25 by 35 feet, cost $3,200, Ch. Thiele, contractor.

Architects Edbrooke & Burnham, for John B. Kirk, Evanston, Ill., residence, 45 by 100 feet, two-story and attic, cellar walls of stone, first story of pressed brick and greenstone trimmings, second story pressed brick and timber, high slate roof with handsome gables and dormers, interior finish of hardwoods, cost $30,000, plans being completed; J. L. Campbell, five houses on Dekalb street, pressed brick front, brownstone trimmings, to cost $3,000 each; F. C. Pennington, residence, on Drexel boulevard near Fortieth street, 25 by 60 feet, Anderson pressed brick front, two-story and cellar, cost $6,000; plans completed.

Architect Julius H. Huber has let the contract for a four-story flat building for Philip Steinmuller, 25 by 70 feet, at No. 505 North Clark street. The front will be of bluestone, swelled above the first story, plate-glass windows, seven rooms in each flat, elevator in the rear, and French roof. It will cost $12,000. He is building for George Schmidt two houses on Bellevue place, 17 by 70 feet each, two stories and attic, with bluestone fronts, to cost $7,500 each; three-story flat building, with pressed-brick front and stone trimmings, on Ontario street, near La Salle avenue, for F. W. Huxmann, to cost $11,000. Plans are being made for two houses, 16 by 39 feet, on State street, near Walton place, for John Willens. The fronts will be of pressed brick, terra cotta and bluestone. They will cost $8,000. He is erecting a two-story and basement flat building and a barn for J. Becker, on Larrabee street, near Webster. The front of the house will be of pressed brick with stone trimmings, and will cost $8,000. A three-story flat building, 24 by 56 feet, pressed-brick front, terra-cotta trimmings, and stained-glass windows, for Joseph Moeshbaecker, at No. 307 Rush street, to cost $8,000. A residence for B. Webber, at Rose Hill, 28 by 50 feet, with high stone basement, pressed-brick front, and 60 feet of greenhouse, to cost $8,000; also a cottage for the same person at Ravenswood, irregular in shape, 28 by 50 feet, to cost $2,300. A memorial chapel at Manistee, Mich., 26 by 40 feet, for R. M. Cherry, to cost $3,000.

Architect Halberg is building for Mr. Schroeder, at Ravenswood, a frame residence of one and one-half stories with brick basement, with three cupolas, halcony and veranda, supported with moulded columns. It contains eight rooms with a large cellar below, all finished in select pine oil; cost about $2,500. Also a fine residence on Grand boulevard and Thirty-fifth street, of pressed brick front and double verandas and dormer windows and Swiss roof. The inside is finished with hard woods. It is 78 by 50, and valued at about $10,000. In connection with this, a barn, 50 by 55, is to be built. Also for L. L. Colburn, a bay front of Anderson pressed brick, with ornamentation and brownstone terra cotta. Also a barn for Ames & Frost, 28 by 50, in addition to a factory they have just completed. It is built, and cost $3,000. For E. L. Allen, a dwelling-house, 50 by 25, on Jackson street, near Ashland avenue, built of Indiana pressed brick, with stone basement, containing two stories, laundry and cellar; one room and attic in upper part finished in hard woods; cost about $6,500. Also for Mr. Hill, on Dearborn avenue near Erie street, 29 by 60, eight-room flat and basement.

Architect Akerman is building three houses for Dr. Baxter, on the corner of Aberdeen and Monroe streets. They are to be built of brick with brownstone trimmings and Mansard roof covered with slate, 30 by 77, 78 by 62, two are two stories and attic, one three stories; cost about $30,000. Also one at 14 Pine street for Mrs. C. B. Fern, 35 by 64, of Anderson pressed brick, cut stone trimmings; cost about $5,000, two stories and cellar; some other work in progress.

Architect Alfred Smith is building a block of dwelling-houses for John M. Dowling, on Pearson street east of the drive, three-story and basement. They have green stone basement, walls of Anderson pressed brick with terra-cotta and brownstone trimmings, 60 by 80 feet, and will cost about $35,000. Also a block of flats for Wm. Hoyt, on the corner of Pine and Indiana streets, 100 feet front, four-story and bascment, built of brick with stone trimmings; cost $40,000. Also a store on Van Buren street near Wood, 25 by 70 feet, for Mark J. Forsyth, brick with stone front; cost $10,000. Also three flats, 22 by 70 feet, built of Anderson pressed brick and stone trimmings, on Elizabeth street near Madison; cost about $9,000. Also a block of dwellings for same party on the same street corner of Randolph, 180 feet front; cost $55,000. Also a house in Oak park for B. L. Pease. The first story is of brick, the remainder frame; cost about $8,000. A dwelling-house for W. D. Messenger on West Jackson street near Ashland avenue, 25 by 64 feet, built of pressed brick, greenstone basement and brownstone trimmings; cost $8,000.

Architects Treat & Foltz have let contracts on house for Mrs. Barber, on Delaware Place, three stories and basement, 25 by 50 feet, to cost about $8,000. They made, also, for E. J. Lehmann, the plans for a block of brick stores and flats, three stories, 46 by 68 feet, stone front, at 885 and 887 North Clark street, to cost $12,000; Bodner Bros., contractors.

Architect L. B. Dixon is preparing plans for a two-story, basement and attic residence, Queen Anne style, for Mr. Albert R. Bremer, on Greenwood avenue, near Fiftieth street. Basement will be of stone, superstructure frame; bay window on south front, and piazza with southeast exposure; interior will be finished in cherry and oak; the cost, including all modern improvements, about $12,000. He planned, also, for C. J. Hess, two dwellings, at Prairie avenue and Thirtieth street, each 25 by 75 feet, block stone basements, oriel windows in two upper stories, slate peaked roofs, hardwood finish, and each to cost $12,000; Joseph Phillips and the Campbells, contractors. Also a fine house for H. J. Miller, on Calumet avenue near Thirty-first street; brick and brownstone, hardwood finish, cost $12,000; Fox & Hawes, builders. For S. A. Clark, residence on Thirty-first street, near Calumet avenue; Elmer Bros. and Brown & Wood, builders. On his boards are plans for two stores with flats above, on West Madison street, near Western avenue, 40 by 75 feet, to cost $12,000.

Architect Norman S. Patton has planned, for P. McEwan, brick store and flats, to cost $12,000, at 89 and 91 West Madison street.

Architect Moore is building for Wm. Ripley, on the corner of Washington and Leavitt streets, a residence 40 by 60, two stories and cellar, with sharp roof, front and sides greenstone and Anderson pressed brick, basement of artesian stone; cost $20,000. Also have plans in preparation for Mr. S. P. Munger, for a residence, 24 by 56, two stories and basement, on Loomis street, between Adams and Jackson. It is to be of Indiana brick with brownstone trimmings, cost about $5,000.

Mr. Moore and J. C. Laine also have plans for the Maverick bank building, in St. Antonio, Texas, 60 by 100, four stories and basement; it will be built of brick, limestone trimmings, and mansard roof, and clock tower. There will be an iron veranda extending around the entire building on the street fronts. Also for L. H. Davis, of Davis and Requea, insurance men, a building for store and flats, stores underneath with flat of eight rooms, on Wabash avenue near Sixteenth street; it is 50 by 80, three stories and basement, limestone front, and will cost about $20,000.

Architect Fred Baumann is building three three-story brick houses on Park avenue and Wood street for John Featherstone, the prominent iron manufacturer. The basement and first story is of stone, and the remainder of pressed brick. The three houses have a dome in the center of the front. Also plans for two houses on Wood street, each of which has a square bay window in front from the basement to the top. Also three other houses for Mr. Featherstone. Each house has a bay window fronting on Washington street. The bay windows stand on a stone column, and are made of stone. The bay windows are framed from the top of the column to the top of the bay with wood. The corners are decorated with wood columns, and the roof has a fancy railing of cast iron. Other houses in progress.

Architect Edward Baumann is building for A. McNally, on North Park avenue north of Garfield avenue, two dwelling-houses, three stories and basement, of brick with limestone front, 46 by 60 feet; cost about $15,000. Also a dwelling-house for M. Ullie, on La Salle avenue north of Schiller street, 22 by 70 feet, of brick, brownstone front; cost about $7,000.

Architect M. L. Beers is building a cottage for Mrs. E. A. Page on Madison avenue, between Sixty-fourth and Sixty-fifth streets, at Wood Lawn; cost about $2,500. Also a residence for Dr. Chas. F. Stewart, on Oglesby avenue between Sixty-fourth and Sixty-fifth streets, at Wood Lawn. This house is finished in butternut, gumwood and Georgia pine. It is 27 by 46 feet, two stories and attic and cellar; cost $5,000. Also a residence for Miss M. E. Spain. This is to be built on the corner of Lincoln and Everett streets at Wood Lawn, and will be 30 by 50 feet, two stories, attic and cellar, and will cost $5,000. Also a residence for Mrs. C. E. Lain, to be built on the corner of Fifty-seventh street and Madison avenue. It is rather peculiar in construction. The style is Colonial, with a large hall running through east and west with a large wood fireplace in each end. The house has a parlor, sitting-room and large hall in the second story, and will be finished in birch, red oak and clear pine. It will be two stories and attic in height, 37 by 49 feet, and will cost about $7,000. Also a residence being built on Greerwood avenue near Fiftieth street for S. E. Williamson, 36 by 48 feet, two stories, attic and cellar in height, to be finished in Georgia pine and clear pine; cost about $6,000. Also a residence on Forty-seventh street between Greenwood avenue and Egandale avenue, to be built for Mrs. J. E. Osburn. The size of the house will be 30 by 46 feet, two stories, attic and cellar. The first and second stories will be finished throughout with birch and red oak, including the servants' room and all halls; cost about $5,500. Also a schoolhouse containing four rooms, to be built at Seneca, Ill. The plan includes all modern improvements; the best heating and ventilation, and the most perfect system of lighting; cost will be about $12,000. Also superintending a schoolhouse that is being erected at Naperville, Ill.

Architect Cleveland is building a residence for F. T. Cochrane, on the corner of Twenty-eighth and State streets, for stores and flats, three-story and basement, 55½ by 62½, pressed brick front, cost about $16,000.

Architect Flanders has just let a contract for Mr. Foss' building on Monroe street, opposite Jefferson Park, a block of flats, three stories in height, cost $7,000. Also a large and handsome building on the corner of West Washington, Union and Waldo place, for Beidler Brothers. The building possesses unexcelled facilities for obtaining a full amount of light, and will be used for the purposes of a wholesale store. It has a frontage of 168 feet upon West Washington street and Waldo place, 150 on Union street. The building will be five stories in height; the first story will be brick piers and iron columns, and above the first story on Washington and Union streets the building will be faced with St. Louis pressed brick, and will be built in the finest style, it being the intention of the owners to lease it out for wholesale grocery purposes, or as a business house of some other character. The facilities of the building would offer superior advantages for handling freight, it being situated upon three different streets, and will be superior to any similar building on the south side. It will contain four elevators upon Washington street for passengers, and four more upon Waldo, to be used exclusively for freight. It will be substantially built, equal to any first-class house in the city; cost $150,000.

Architect Colton is building a residence for Chas. K. Miller, on the north side near Schiller street. It is three stories and basement, of pressed brick, brownstone trimmings, 35 by 70 fect, with barn connected; cost $20,000. Several others in contemplation.

Architect Arend is building a synagogue on the north side, on Rush street. It is 54 by 112 feet, built of brick, stone basement with a high tower in the center, and is very tasty in design.

Architects Furst & Rudolph are building for L. W. Fick, a dwelling-house on the southeast corner of Ashland avenue and Congress strcet, stone front, two stories, basement and attic, 40 by 60 feet; cost about $25,000. Also a dwelling-house for N. Russ, on the northcast corner of Ashland avenue and York streets, built of Milwaukee pressed brick and Bedford stone trimming, 40 by 60 feet, two stories, basement and attic; cost $30,000. Also in connection with this a barn, to cost $4,000. Also a brick block of two flats, brownstone trimming, for Wm. H. Flemming, on Sangamon street near Van Buren street, 50 by 73 feet; cost about $18,000. A residence on North Dearborn avenue for L. Sturckow, three stories and basemcnt, 25 by 72 feet, of pressed brick, brownstone front; cost $20,000. Also finishing an office for the Adams & Westlake Manufacturing Company, in their building on the corner of Ontario and Market streets; cost $8,000. Also a flat on Sangamon street near Madison, 20 by 64 feet, three stories and cellar; cost $9,000. Also a brick block of flats, two stories, 48 by 60 feet, on South Dearborn street near Twenty-third, for Mrs. C. Muhlke; cost $13,000. Also a brick store, flats above, for J. J. Kreer, 25 by 65 feet, on the corner of Market and Oak streets, three stories and basement; cost $8,000. Also a factory building of four stories for B. D. & W. N. Eisendrath, on Sangamon street; cost $11,000. Also for M. Campbell, a two-story brick residence with basement and brownstone trimmings, 24 by 54 feet, on Ashland avenue near Congress street; cost about $10,000. Also for Mr. Wolf, on Wabash avenue near Thirty-third street, pressed brick, brownstone trimmings, two stories and cellar, 50 by 72 feet; cost about $18,000.

Carthage, Ill.—Architect G. W. Payne reports unfavorable condition, but improving, and in addition to sundry small work of his office, or on the boards, was a remodeled farmhouse for H. M. Walker, two-story frame, filled with brick, 36 by 59 feet, cost $5,000; completed; McCohn & Payne, contractors. The Western Creamery Association, of Osceola, Iowa, have just completed a creamery at Carthage, cost $6,000, with capacity to make 1,200 pounds butter daily.

Cincinnati, O.—A joint meeting of the courthouse trustees, county officers and county commissioners, was held on the 21st ult., for the purpose of inspecting the plans of architect McLaughlin, for the reconstruction of the courthouse destroyed by the great mob. The plans were approved after a few changes. The principal change from the old structure contemplates the doing away with the rotunda, and in its place having another story erected, covering one-half of the building. In this addition the circuit-room and jury-rooms will be located. The reconstruction will be completed in the course of one and a half years. The outer walls will remain, at least such as will be deemed safe by experts, and as much of the old material utilized as possible.

Architect S. E. Des Jardens: For Geo. W. Hardacre, three frame houses in block, cost $8,000; under way; Bice & McMillan, contractors. L. F. Weimer, frame house, cost $4,500; H. A. Smith, four-story brick and cut stone, 25 by 80 feet, cost $14,000; Wm. H. Stewart's Sons, contractors. John L. Whetstone, four-story brick factory building, 82 by 56 feet, cost $14,500; Jos. Griffith & Sons, contractors. John L. Whetstone, four-story brick 140 by 56 feet; projected. F. C. Cross, frame dwelling, cost about $8,000. H. T. Eddy, brick dwelling, cost about $8,000. J. L. Irviue, brick dwelling, at Richmond, Ky., cost about $12,000. J. W. Barton, two-story brick, northwest corner Summit and McMillan streets; cost $16,000. J. W. and F. G. Robinson, two-story brick, Richmond street, between Mound and John, cost $4,000. J. G. Spicker, three-story brick, Michaels street, near Neave, cost $5,000. J. W. Sibley, two-story brick, Francis, east side Gilbert avenue, north of Morris street, cost $3,000. H. Rothkopf, three-story brick, north side Poplar street, near Freeman, cost $4,500. L. Burger, three-story brick, southcast corner of Clark and Freeman, cost $2,800. Chas. Barnes, three two-story bricks, north side Elder street, between Third and Fourth, cost $5,000. Ed. Hoffman, two-and-a-half-story frame, north side Warner street, west of Ravine, cost $2,000. L. Voight, two-story frame, south side Winker street, near Kemper lane, cost $2,000. J. G. Rodemaker, three-story brick, Eighth and Burns street, cost $8,000. F. Bill, two-story brick, Storrs, between Burns and Neave, cost $3,500. Chas. Gleaser, two-and-a-half-story brick, south side Molitor, near Vine, cost $3,500. W. E. Stevens, two-story frame, west side Willow, between Colerain avenue and Eastern avenue, cost $3,000. Harwood & Sons, three-story brick, north side Seventh street, between Baymiller and Freeman, cost $6,700. W. H. Stewart & Sons, three-story brick, No. 283 Vine street, cost $4,500. Mrs. J. Cottman, two-story frame, west side Price street, between Slack and Boas, cost $1,800. Jno. Feller, two-story brick, No. 116 Calhoun street, cost $1,500. Jno. Feller, two-story brick, west side Dallas street, near Molitor, cost $2,800. John Myers, two two-story bricks, east side Chatham street, between Locust and McMillan streets, cost $4,000. F. and D. Kallendorf, two-story brick, No. 442 Linn strcet, cost $4,500. Geo. Hauer, two-story brick, Browne street, opposite Brighton House, cost $4,000.

The more important building permits of late date include the following: Hy. Kueckheimer, three-and-a-half-story brick, south side Providence, between Fifteenth and Fourteenth streets; cost $4,000. Fred Otte, two-and-a-half-story brick, Price avenue, west of Matson's Place; cost $5,000. Jas. Griffith & Son, repair two-story brick, No. 202 Fourth street; cost $3,000. J. Eichbusch, two-story brick, 40 Jones street; cost $2,000. Hy. Harris, two-and-a-half-story brick, east side Considine, near Warsaw pike; cost $3,500. Hy. Weiman, two-story brick, 1177 Vine street; cost $4,000. Bettman & Bloom, repair four-story brick, 116 West Third street; cost $5,000. Geo. Pott, three-story brick, north side Gest, between C. H. & D. R. R. and State avenue; cost $6,500. A. Hiener, two-story brick, northeast corner Fourth avenue and Jane street; cost $5,000. Augusta Kuchenmeister, four-story brick, east side Gilbert avenue, near Sixth street; cost $3,000. M. E. Dibble, seven-story stone front, corner Patterson alley and Main street; cost $30,000. D. H. Lyons, three-story brick, 418 Seventh street; cost $5,000. A. Reely & Son, four-story brick, north side Findlay, between Central avenue and Canal; cost $5,000. James Griffith & Sons, two-and-a-half-story frame, east side of Loth, between Vine and Walnut streets; cost $2,500. James M. Glen, four-story brick, 173 Broadway; cost $5,000. Miller & Ronne, two-story brick, 51 Peete street; cost $2,500.

Architect Geo. W. Rapp reports business good, and outlook favorable, and the following under way: For Christian Moerline, six-story and basement brick store building, on corner Pearl and Race streets, terra-cotta and freestone trimmings, front open, with iron columns between large windows, 48 by 64 feet, cost $25,000. The Thos. Kirby heirs, remodeling brick building at cost of $6,275. Julius Balke, Sr., opera house and store building, at Belleview, Ky., large hall and stage for theatrical performances, two smaller halls for lodge purposes, of dark Newport brick and ironstone fronts, 56 by 90 feet, cost $25,000.

Cleveland, O.—An active movement in favor of the erection of a large exposition building and music hall combined, with board of trade rooms in upper story, enlists the co-operation of the leading business men, and the zeal with which the enterprise is inaugurated presages the speedy completion of a building that will be among the largest and best of the kind in the country.

The Cleveland Storage Company will in a few days begin the erection of a magnificent storehouse on Scranton avenue. The walls will be of brick, and built very thick. The length of the building will be 110 feet and its width 175 feet. It will be used for storage of all kinds of merchandise.

Columbus, O.—The directors of the Board of Trade, at a meeting on the 22d ult., requested Senator Sherman and Congressman Converse to do all in their power to secure the passage of the bill, prepared by the latter, making an additional appropriation of $150,000 to increase the size of the government building at Columbus. The building as planned and under way is deemed entirely inadequate for the needs of the place.

Denver, Col.—Architect Wm. Quayle, the People's Tabernacle, 50 by 80 feet, Blake street, cost $7,000.

Architect R.S. Roaschlub, for Mrs. S. S. Tallant, two-story brick dwelling, 24 by 56 feet, on Curtis street, cost $4,500.

Architect E. P. Brink, for L. Alkire, two-story brick dwelling on Broadway, cost $10,000.

Architect E. Anthony, for Richard Sopris, two-story brick double dwelling, 46 by 50 feet, on Stout street, cost $7,000.

Architect F. E. Edbrooke, for W. B. Daniels, four-story stone-front business block, 25 by 125 feet, on Lawrence street, cost $20,000.

Architects Varian & Sterner, for Geo. W. Timerman, two-story business block, 50 by 125 feet, on Champa street, cost $13,000.

Architect Fred A. Hale, for Westminster Presbyterian church, South Tenth street, cost $5,000.

Detroit, Mich.—Architects are generally resting from the rush of a busy spring, but a few are still engaged on plans for buildings yet to be erected. Contractors were said to be generally idle by a leading architect, who thought that most of the building for the season was very nearly completed. A slight pick up in business next week, however, would not surprise him.

Another architect had finished all his larger contracts, but was still at work on quite a number of unpretentious dwelling-houses. This kind of work he thought was plentiful among all the architects. He had several matters on the tapis which he was compelled to keep quiet for a day or two, but if the reporter would call after that lapse of time he would perhaps have several good "building items."

Howard & Northwood are making extensive alterations and improvements on the malthouse on Grand River avenue, near the railroad crossing. The changes will cost $12,000.

Among the important building permits issued are the following: Durst & Wood, two-story frame dwelling, to cost $2,000; Walter Beckwith, two-story brick horse-shoeing shop, at 102 Brush street, to cost $2,000; John La More, two-story frame dwelling, at 54 Pitcher street, to cost $3,000; A. J. Collins, two-story dwelling at 297 Harrison avenue, to cost $2,000; W. H. Pocock, three-story brick dwelling on Lafayette avenue, to cost $6,000; Julius Wilke, three two-story frame dwellings on Wabash avenue and Howard street, to cost $3,500; Daniel Sullivan, block of two three-story brick stores and hall on Michigan avenue, to cost $9,000; Leo Scheible, two frame dwellings on Abbott street, to cost $3,400; C. K. Secor, frame dwelling, corner Ferry and St. Aubin avenue, to cost $7,500; Wuestewald & Bro., brick store, on Russell street, to cost $4,100; Jones & Co., brick addition of two stories, to cost $3,500; the Detroit Sanitarium, third story to brick building on West Fort street, to cost $5,000.

Architects Donaldson & Meier are at work on a number of small store buildings and residences. A better business for some time past is reported, with a good prospect for all classes of buildings next fall.

Architect A. C. Varney reported work commenced on handsome building of Butler & Chope on Randolph street, and that Abraham Lapham was putting up a $6,000 residence on Bagg street near Cass. He says a false impression prevails about the price of brick, but he wants the people to know that the brickyards have a large amount of brick on hand, and that contracts can be made just as cheap now as in the spring.

Additional building permits: John Beattie, three-story brick store at 288 Grand River avenue, cost $5,000; F. S. Claxton, two-story brick store at 181 and 183 St. Aubin avenue, cost $2,100; W. G. Vinton & Co., two-story brick barn, $2,800; Richard Rogatzky, two-story brick store at 716 Michigan avenue, cost $4,000; Abraham Lapham, three-story brick dwelling at 181 Bagg street, cost $4,400; Gordon W. Lloyd, two-story brick car-works office on Foundry street, cost $2,000; Gordon W. Lloyd, three-story brick dwelling at 546 Woodward avenue, cost $18,000; Clement Lafferty, six frame cottages on Howard street, cost $4,950; W. D. Smith, two-story brick dwelling at 89 Warren avenue, cost $6,000; Richard W. Dean, two one-story frame dwellings, cost $2,800; Robert Barrie, three-story brick store at 479 Grand River avenue, cost $4,500; Spitzley Bros., three-story brick dwelling at 272 Malcomb street, cost $2,200.

Dubuque, Iowa.—Architect F. D. Hyde, for Dubuque Natatorium Co., one-story brick, 42 by 100 feet, cost $4,000; under way. W. W. Woodworth, brick business

block, one-story temporarily, 30 by 114 feet; under way. C. C. Crowell, of Charles City, Iowa, two-story frame cottage, cost $3,500; plans not completed. M. A. Flanagan, of Fort Benton, M. T., two-story brick residence, cost $6,000; plans sent out. B. S. Richards, Rock Rapids, Iowa, two-story and basement, bank and store building, brick, tin roof, 50 by 68 feet, cost $8,000; plans sent out. Geo. F. Eggert, of Ackley, Iowa, two-story brick veneered residence, to cost $3,000; making plans.

Elkhart, Ind.—Architects N. Weaver & Son report the outlook for building as not flattering, and the following under way: For Elkhart Opera House Company, three-story brick, composition and metal roof, 83 by 165 feet, cost $50,000. J. A. Cook, two-story brick store building, 44 by 80 feet, cost $10,000; N. Weaver, contractor. S. S. Strong, brick residence, cost $10,000; N. Weaver, contractor. F. W. Miller, frame residence, cost $6,000; Wm. Barger, contractor. Hal Davenport, frame residence, cost $2,000; N. Weaver, contractor. N. Weaver, frame residence, cost $3,000. D. S. Simonton, brick store rooms, 21 by 75 feet, cost $4,000; M. Wertz, contractor. Andrew Hay, brick residence, cost $3,500; S. Daub, contractor. High school brick building, cost $20,000; S. Daub, contractor. Projected: Waterworks for Elkhart Water Co.

Grand Rapids, Mich.—Architect Sidney J. Osgood: For L. G. Maron, block of stores, brick, three stories, 132 by 113 feet, cost $25,000 (under way); for the same, block of stores, 110 by 70 feet, two and three stories, cost $15,000; also for same, a tenement house, cost $2,500. City Hall at Adrian, Mich., brick and stone, two and three stories, slate roof, iron cornice, 53 by 81 feet, cost $16,000.

Illinois Corporations.—The following corporations were licensed recently by the Secretary of State: The Mitchell Foundry Company of East St. Louis; capital $10,000; incorporators, Charles A. Mitchell, Henry A. Alexander and Ira C. Terry. The Rockford Twist Drill and Bit Company; capital $75,000; incorporators, James P. Thompson, Harry W. Thompson and Robert H. Tinker. The Contracting Plasterers' Association, of Chicago; without capital stock; for mutual benefit; incorporators, William H. Dorothy, Joseph Eastman and William H. Pigott. A certificate was filed to record an increase of the capital stock of the Union Brass Manufacturing Company, at Chicago, to $250,000; also of the National Warehouse Company, at Chicago, to $125,000. The Soper Lumber Company, of Chicago, has increased its capital stock to $350,000.

The Belvidere Brick and Tile Company, at Belvidere; capital stock, $3,500; incorporators, A. J. Thompson, William Eyre, J. C. Longcar and A. O. Williams. The Trenton Tile Manufacturing Company, at Trenton, Clinton County; capital stock, $5,000; incorporators, M. Ginzel, Adam Ewing, Jr., Joseph Hanke, H. H. Crea, F. Leonard and John Burton. The Northwestern Brick Company, of Chicago; capital stock, $25,000; incorporators, August Dresel, John Felke and Henry Sebelin.

Indianapolis, Ind.—Architects Hodgson, Wallingford & Stem report a fair amount of work, but business not so good this year as last, and builders taking contracts at close figures. For H. N. Norton, frame residence, cost $6,000. For Wm. Tucker, frame residence, $6,000; two frame churches, cost $5,000. For Charles Snyder, frame residence, cost $3,000; under way; J. Behrman, contractor. For Ben. Walcott, brick and frame residence, cost $7,000; under way; J. N. Corcoran, contractor. For Dr. Baker, frame residence, cost $5,000. For Wm. F. Stilz, frame residence, cost $5,000. For H. Ohr, frame residence, cost $2,000. For W. T. Fenton, block of brick residences, cost $12,000. For F. R. Judson, frame residence, cost $4,000. For E. Vansickle, frame residence, cost $4,000. For M. Gold, of Vincennes, Indiana, frame residence, cost $5,000; under way; Joseph Hammond, contractor.

Joliet, Ill.—Architect Julian Barns reports the present condition fair, the outlook not flattering. For Levi Shaffner, two-story frame residence, tin and shingle roof, 32 by 57 feet, cost $6,000, foundation laid; G. White, contractor. Charles Thayer, two-story frame residence, tin and shingle roof, 34 by 48 feet, cost $4,000, foundation laid; S. B. Pease, contractor. James C. Zarley, two-story frame residence, 30 by 36 feet, cost $2,000; Julian Barns, contractor. W. G. Andrews, two-story frame residence, 28 by 47 feet, cost $3,000. E. Talbot, two-story frame residence, 32 by 48 feet, cost $2,500. Samuel Shuffler, two-story frame residence, 30 by 45 feet, cost $2,800 (under way); Julian Barns, contractor.

Kansas City, Mo.—Architect F. B. Hamilton reports business very good, and plans for Ariel Meinrath, for three-story brick warehouse, 24 by 105 feet, cost 6,000; now letting contracts. L. A. Allen, two-story brick residence, 35 by 56 feet, cost $7,000, foundation being laid. D. B. McMechan, two-story brick dwelling, 28 by 50 feet, cost $6,500. Wimbush, Powell & Co., four-story brick publishing house, 42 by 60 feet, cost $12,000. G. B. Shaw & Co., two-story bank building for town in Kansas, 25 by 50 feet, cost $4,000.

Milwaukee, Wis.—Weather has been favorable for building operations, and the opportunity has been improved to do a great deal of improvement. The buildings erected exceed the number built in any former year, although the new ones are not especially conspicuous for architectural prominence or cost. Among the important building permits recently issued we note the following: A dwelling-house for C. Zierman, on Thirteenth street, to cost $2,000; a frame building for W. Richter, on Chestnut street, to cost $4,000; a double dwelling for Mr. Harnett, on Broadway, to cost $5,000; a brick factory for H. Riedeberg, on Menominee street, cost $7,000; a brick building for Geo. H. Watkins, on Biddle street, corner of Jefferson, cost $20,000; a frame dwelling for Mr. Ordway, on Astor and Knapp streets, to cost $4,500; a brick veneered building for J. L. Larson, on Oregon street, to cost $8,000; a dwelling for Fred Ehur, on Walnut street, cost $2,000; a factory for F. Roth, on Seventh street, cost $2,000; two frame dwellings for William Wood, on Knapp street, to cost $7,000; a dwelling for Charles Knorr, on Racine street, to cost $2,500.

A dwelling, costing $3,000, for Otto Schorse, on Twenty-first street, lots 22 and 23, block 4, second ward. A store, costing $4,300, for M. Kunybeil, on lot 20, block 207, corner of Fourteenth and State streets, second ward. A store for H. H. Hackenthal, costing $6,895, on lot 1, block 47, corner of National and Third avenues, eighth ward. Three frame cottages, costing $3,500, on lot 1, block 13, Orchard street, twelfth ward. A brick factory, costing $4,500, for L. Frank & Son, on lots 10 and 11, block 151, Market street, first ward. A brick-veneered dwelling, costing $7,000, for Wm. Thwaits, on lots 4 and 5, block 138, Van Buren street, first ward.

Minneapolis, Minn.—Architect Jas. H. Record reports more building going on at the present time than ever before, and plans for Eugene A. Merrill, two-story, attic and basement building, brick, faced with St. Louis pressed brick and trimmed with Ohio sandstone, slate roof, hardwood finish niside, Gothic and Queen Anne style, 52 by 96 feet, cost about $20,000, contract not let.

Kerridge & Son bought three lots in Oak Lake addition, and will build a residence, a series of greenhouses, and will plant one lot to flowers. B. Aaronson is to build a brick block, with a frontage of 60 feet, on Central avenue, adjoining the building recently erected by Mr. De Laittre. The block will be of brick and is to contain three stories. Mr. De Laittre is constructing a three-story hotel building on the same side of the street. Building Inspector Pardee is ready to issue permits, and has accorded to J. O. Breding the right to erect a double brick veneered tenement on Second avenue south and Fourteenth street, to cost $7,000. C. F. Powell is to build an $8,000 house between Tenth and Eleventh avenues south, on Fifth street, in the east division. The street-car company has commenced to build a new barn for the extension of a line to penetrate the region about the Milwaukee shops and below the fair grounds. The barn will be 106 by 180 feet, two stories high, besides a storeroom 36 by 180 feet. The improvement will cost $22,000. Eastern parties are negotiating for a site on Thirty-third avenue, between Twenty-seventh and Twenty-eighth streets south, on which to build a plow factory. Hill & Lindley are to build a four-story business block, 44 by 130, on First avenue north, between Third and Fourth streets, at a cost of $20,000. W. S. Pattee has commenced the excavation for a block of stores on Third street, between Eleventh and Twelfth avenues south. Central avenue is enjoying a good-sized business boom this season, an unprecedented number of substantial business blocks being in progress or prospect of erection. In addition to those already under way, mention of which has already been made, A. H. Ives & Co. contemplate the erection of a three-story brick block with a frontage of 66 feet, on the site now occupied by three forlorn shanties just below the University avenue corner. The building will cost between $15,000 and $20,000, and work is to be begun in September. On the opposite side of the avenue, on the site now occupied by Hawes & Williams' shoe store, J. S. Lane will, this season, put up a three-story brick block.

Minnetonka, Minn.—A number of excellent hotels have been erected on the shores of Lake Minnetonka, the largest of which, Hotel Lafayette (at Minnetonka Beach), one of the finest and largest summer-resort hotels in the world, beautifully situated on the shores of this lake, and hitherto the objective point for thousands of our summer tourists from the South, East and West, is gaining in popularity each season, as its attractions become more widely known. The house is capable of accommodating nine hundred guests, and is supplied with all the conveniences and comforts of the modern hotel. An elegant line of steamers, with accommodations for over five thousand people, have been established on Lake Minnetonka, and a plentiful supply of sail and row boats will be found at all the landings. Some of the swiftest yachts in the country are numbered among this fleet.

New Orleans, Miss.—The main building of the world's industrial and cotton centennial exposition at New Orleans, now being constructed, is in many respects the most remarkable edifice ever erected in this country. The only larger structure in the world intended for the display of natural and industrial products, mechanical appliances, etc., is the Crystal Palace at Sydenham, England. Many of the principal architects of the north and south engaged in the competition for the plan of this building, and a number of elaborate and excellent designs were presented for the examination of the exposition management. After very careful consideration of all the details of each design, the plan prepared by Mr. G. M. Torgerson, of Meridian, Miss., was selected as affording the most complete and economical arrangement for exhibition purposes. Considerable surprise was occasioned by this choice. It was wholly unexpected that an architect in a little Mississippi town would gain a victory over men who had furnished designs for some of the chief buildings on the continent. Mr. Torgerson was highly recommended by Mr. G. W. Cable, and is a Swede, thoroughly educated and experienced in all the branches of his profession. A few years ago he located at Oxford, and has so revolutionized the architecture of the place that there are few handsomer cities anywhere. In his plan for this great exhibition building, Mr. Torgerson has sought to secure one vast unbroken level for the display in the most compact and ornate form. In this respect he has succeeded so admirably as to call forth commendatory expressions from the projectors of all former American expositions. He has produced the largest single room, every portion of which can be seen from any point without obstruction, of which there is any knowledge. The building is 1,378 feet long by 905 feet wide, covering thirty-three acres, or eleven acres more than the main building of the Philadelphia centennial exposition of 1876. There are 1,656,300 square feet of floor space, including the gallery. The reader may form a better impression of the vast dimensions of the structure by imagining three ordinary city squares, or blocks, one way, and five the other, covered by a solid roof. And if he chooses to allow his fancy to carry him still further, he can picture a monster panorama of the world's industry, extending before his vision uninterrupted by a single object. The roof, which is being made in Cincinnati, will cover 1,000,000 square feet. The active commercial rivalry of the different sections is aptly shown by the distribution of contracts for the materials. The window sash comes from Milwaukee, Wis. The glazing will be done by St. Louis parties. Four thousand kegs of nails are being shipped from Wheeling, W. Va. Nine million feet of Mississippi lumber will be consumed. A massive and magnificent group in bronze, typical of America, to be placed over the main entrance, is being made at Canton, Ohio; also a statue of Washington and Columbus, and coat-of-arms of all the states, which will appear in medallion form as part of the exterior ornamentation. Exquisitely modeled cornices are being made at New Orleans. The building will be 60 feet high with a tower 115 feet high, and the architect has been unusually fortunate in rendering the exterior exceedingly unique and attractive. A platform will be erected on the tower, reached by elevators, from which visitors may have an exceptionally fine view of the city of New Orleans, the exposition grounds, the Mississippi river, and the surrounding country. There will be one line of gallery extending around the entire circumference of the building, to which visitors will be carried by twenty steam and hydraulic elevators, representing all the manufacturers of those conveyances in this country. The music hall, situated in the center of the building, will be 364 feet wide, and will comfortably seat 11,000 persons. The platform is being built for 600 musicians. To light the building with incandescent lamps will require 15,000 lights and 1,800 horsepower. To light with the arc system will require 700 lamps and 700 horsepower to operate the dynamo. The total steam required for lighting and for machinery hall will be at least 3,000 horsepower. In this estimate is included the power for five arc lights of 36,000 candle power each, which will light the grounds. These are the largest single lamps ever constructed. The building will be in complete readiness for the reception of articles intended for exhibition by the middle of August.

Ottumwa, Iowa.—Architect Edward Clark says not many building projects are contemplated, but anticipates a building boom in about sixty days. Plans for Jno. Fullen, of Agency City, Iowa, two-story brick and stone residence, 28 by 54 feet, cost $2,500. For Daniel Stearns, at Garden Grove, Iowa, two-story frame residence, lined with brick, stone foundation, cost $4,500.

St. Louis, Mo.—W. P. Mullen's new residence on Dayton street near Glasgow avenue, Architect C. K. Ramsey, three stories and billiardroom attic, will be finished with terra cotta; estimated cost $10,000. D. B. Gould's house on Washington avenue between Eighth and Ninth streets, will be six stories, 60 by 75 feet, front terra-cotta joinings, footing and center of columns Missouri granite; building will be 90 feet high.

The new Marine Hospital, now in course of erection, and for the building of which the sum of $35,000 was appropriated, consists of three frame one-story pavilion wards radiating from the new executive building. The north ward is 70 feet long, the center ward 136 feet long, and the south ward 100 feet long, with an ample supply of windows for the admission of light and air. All around each ward is a covered porch, where the patients may walk during convalescence. The rear of the two outer wards forms a sort of quadrangle, in which are the lavatories and smoking-room. The hospital stands on an eminence in the center of seventeen acres, and commands a view of the Mississippi and the undulating prairie lands across the river.

St. Paul, Minn.—The *Pioneer Press* of the 25th ult. contained a cut of the new University Coliseum, used during that week for the first time for the university commencement exercises. It was planned and built under the direction of architect L. S. Buffington, of Minneapolis, and is described as follows: The structure has been built with more reference to its internal arrangement than its architectural beauty. It nevertheless is a striking one, and its capacity and admirable arrangement is likely to be a surprise to the thousands of people who may visit it during the coming month. It is now practically completed, and the painters are putting on the outside finishing. In form the building is on the inside almost eggshaped, and measures 165 by 154 feet. The main roof is carried on a truss which spans a distance of 111 feet — wider than Washington or Hennepin avenue. It is fifty-five feet and a half from the outside of the sounding-board to the front of the two tiers of galleries. The building is framed, but it has been arranged with fifty-six doors, ample exits, and wide, easy staircases. The stage is six feet high, and for the festival will be arranged with a pyramid of seats. The square portion of the building shown in the cut contains the dressing-rooms in the rear of the stage and great sounding-board. This portion of the building contains four floors, and from a rear balcony on this part of the building a commanding view is secured of the city and the falls of St. Anthony. The building is to be seated with movable chairs, and lighted with the electric lights. Although built of wood, the Coliseum has been constructed with unusual strength, with a view to the accommodation of great crowds of people.

After many months of deliberation the courthouse commission agreed upon plans for the new building, and, as the need for additional room for officers and records is very pressing, it is thought the work of building will be commenced at once, and vigorously prosecuted until completed. The plans of architect E. P. Bassford, of St. Paul, were, after mature consideration, adopted. They provide for a building 232 feet on Fourth street by 144 on Wabasha street. Its cost is estimated at $300,000.

Rumors that work had been stopped on several of the handsome houses on Summit avenue are incorrect. In one or two instances a short suspension was rendered necessary to perfect plans.

Important building permits were issued as follows: W. F. Davidson, for a six-story brick block, 85 by 100 feet, on the east side of Wabasha street, between Third and Fourth streets, cost $30,000. J. M. Wild, three-story brick, 50 by 66 feet, on south side of Seventh, between Bradley street and Manitoba railway; cost $14,600; C. Herrmeyer, two-story brick store, 30 by 60 feet, on Seventh street, to cost $2,000. John Weber, two-story frame dwelling, 20 by 46 feet, on Selby avenue, to cost $2,200. William F. Davidson, six-story brick and stone business block, 85 by 100 feet, on Wabasha street, to cost $30,000. J. M. Wild, three-story brick block, 50 by 66 feet, on Seventh street, to cost $14,600. A. L. Longellier, two-story frame dwelling, 20 by 47 feet, on west side of Irvine Park, to cost $2,000. Patrick Butler, three-story brick veneered double dwelling, on College avenue, to cost $5,000. J. E. Strehlin, three-story brick double store and dwelling, 24 by 81½ feet, on south side of Dayton avenue, to cost $7,235. E. Bouthe, two-story brick veneered building, 20 by 50 feet, on east side of Robert, between Twelfth and Thirteenth streets, $2,000. John Nelson, two-story frame dwelling, 29 by 42 feet, on east side of Rohert, between University and Sherburne, $2,700.

Architect W. H. Castner reports a healthy condition and prospects fair, and the following buildings under way: For P. Schliemann, two three-story brick store and tenement building, 46 by 64 feet; cost $12,000; Lettan & Weinke, contractors. For P. R. McDonnell, three two-story brick store and tenement buildings, 72 by 40 feet; cost $12,000; Powers, Wheeler & Matteson, contractors. For Geo. Rochat, two three-story brick store and tenement building, 48 by 70 feet; cost $13,000; Lauer Bros., contractors. For Capt. E. C. Bowen, frame, 40 by 60 feet; cost $5,000; D. D. Doyle, contractor. For C. A. Esterley, double frame tenement, 40 by 42 feet; cost $5,000; J. J. McGeehan, contractor. For P. Hall, frame dwelling, 22 by 42 feet; cost $2,500; P. Hall, builder. For W. H. Castner, frame dwelling, 22 by 39 feet; cost $2,000; J. J. McGeehan, contractor; and bank at Baldwin, Wisconsin, projected; one-story brick, 22 by 36 feet; cost $2,300. For Commodore Davidson, on Wabasha street; cost $30,000. For J. M. Wild,

building on Seventh street; cost $14,000. For Abbie L. Smith, two-story brick veneered dwelling on Olive street; cost $5,000. For C. D. Gilfillan, three-story brick double dwelling on Grove street; cost $7,413.

Streator, Ill.—Architect F. S. Allen reports the outlook better than ever before, that over $1,000,000 will be put into buildings in this locality this year, and the following buildings under way: For Jas. Sexton, two-story frame residence, 40 by 55 feet, cost $4,000; Robert Myer, contractor. Henry Baker, three-story brick store, 25 by 100 feet, cost $6,000; Sol. Eghert, contractor. M. E. church, two-story frame parsonage, 28 by 50 feet, cost $2,000. Fred Richards, two-story frame residence, 34 by 66 feet, cost $5,000. Rev. H. A. O'Kelly, brick and stone church, 57 by 122 feet, cost $20,000; Mulfor, Lukins & Co., contractors. Samuel Dickennay, two-story frame school building, 26 by 40 feet, cost $2,000. Peter Melloson, five-story stone stores, 60 by 100 feet, cost $15,000. I. I. & I. R. R. Co., two-story frame depot and general offices, 26 by 84 feet, cost $4,000; J. H. Cradock, contractor. Rev. M. J. Eagan, stone and brick church, 47 by 100 feet, cost $8,000; Wise & Wolf, contractors. F. Holmes, two-story frame residence, 32 by 50 feet, cost $3,500. Fred W. Lukins, three-story stone residence, 53 by 78 feet, cost $12,000.

Topeka, Kas.—An active season for contractors is reported, and a great demand for masons, carpenters and laborers. The following important permits were recently issued: E. Bennett and son, two-story brick stable, on West Eighth avenue, to cost $5,000. Kansas Publishing house, three-story brick and stone addition, 50 by 100 feet, and 38 by 30 feet, on Eighth avenue, to cost $9,000.

Architect H. M. Hadley reports business good, never knew it better, and plans for J. R. & Jacob Mulvane, for remodeling of large brick building now occupied by A. T. & S. F. railroad company offices, 25 by 115 feet, will be heated by steam, will have hydraulic elevator and all modern improvements, three stories and basement, to cost $15,000. For J. A. Hutchinson, two-story frame residence, 30 by 55 feet, to cost $3,500; stable for same, to cost $1,800. For A. M. E. Church, stone building, one story and basement, in Romanesque style, 60 by 100 feet, cost $16,000; out for bids. For F. H. Leadley, two frame residences, 35 by 60 feet and 25 by 45 feet respectively, cost $4,250; F. L. Stevenson, contractor.

Architects Haskell & Wood report business good, and plans for the following: T. Dwight Thacher, printing house, cost $10,000. For T. B. Sweet, residence, cost $4,500. For Judge Chandler, Independence, Kansas, residence, cost $5,000. For F. A. Head, Clay Center, Kansas, residence, cost $10,000. For hotel, Prescott, Arizona, cost $40,000. Congregational church, Valley Falls, Kansas, cost $4,000. For M. E. Church, Wichita, Kansas, cost $20,000. For Banker, Holton, Kansas, residence, cost $5,000.

A Decorative Exhibit.

THE fine building recently erected for Messrs. Healy & Millet, at 223 and 225 Wabash avenue, was thrown open for inspection on the 31st ult. The main floor is devoted to showrooms with a private office in the rear. The different departments of this firm's work, ranging through all the varieties of stained glass, artistic furniture, wood mantels, papier mache and other relief work, tapestries, wall-paper, frescoing, etc., were each handsomely presented. The most striking exhibit was of course the stained glass, in the manipulation of which these gentlemen are thorough masters. Some of the designs shown were a pleasing surprise, their originality and freedom of design carrying the thoughts beyond the present to the future, that seems, after thousands of years of stained-glass making, to be but beginning. Wood mantels were also exhibited in various artistic designs, and some old and rare tapestries were hung on the walls, forming a pleasing background. The studio,—a veritable artist's "den," with its sketches, easels, walls hung with bits of bric-a-brac, old armor, etc.,—is an attractive corner; in fact, for a showroom devoted to trade, the artist's hand is present everywhere to a remarkable degree. The arrangement will remain for public inspection and visitors will be sure of a cordial reception.

THE Pioneer Fireproof Construction Company will remove from their present offices into their own structure on Twelfth street. The building they are now rapidly completing is a thorough departure from anything before constructed, entirely built of fireproof materials, and will be fully described in a future number. The company have made this move in order to have greater facilities for handling their business, secure storage room and railroad connection direct with their factory, at Ottawa, Ill.

PROPOSALS.

POSTOFFICE.

[*At Sorel, P. Q.*

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, May 14, 1884.

Sealed tenders, addressed to the undersigned, and endorsed "Tender for Postoffice, etc., Sorel, Que.," will be received at this office *until Monday, the 23d day of June next*, inclusive, for the erection of Postoffice, etc., at Sorel, Quebec.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the Custom House, Sorel, on and after Monday, the 2d day of June next.

Tenders must be made on the printed forms supplied.

Each tender must be accompanied by an *accepted* bank check, made payable to the order of the Honorable the Minister of Public Works, *equal to five per cent.* of the amount of tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the check will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,
F. H. ENNIS, Secretary.

MARBLE FLOOR TILING AND MARBLE MANTELS WITH HEARTHS.

[*At Montgomery, Ala.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 28, 1884.

Sealed proposals will be received at this office *until 2* P.M. *on the 18th day of June, 1884*, for furnishing and laying all the marble floor tiling and furnishing and setting in place, complete, the marble mantels with hearths and the hearths and fire slips for wood mantels required for the Courthouse, Postoffice, etc., building at Montgomery, Ala., in accordance with drawings and specification, copies of which, and any additional information, may be had on application at this office or the office of the superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

TO CONTRACTORS.

Plans and specifications for building at the Iowa Institution for the Deaf and Dumb can be seen at the office of the Superintendent on and after June 5, 1884. Sealed proposals for working in accordance with same will be received *up to noon of June 18, 1884*. Right to reject any or all bids reserved.

For further information address

H. C. HAMMOND,
Superintendent Inst. D. and D.,
Council Bluffs, Iowa.

STEAM HEATING APPARATUS,

[*At Kansas City, Mo.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 20, 1884.

Sealed proposals will be received at this office *until 2* P.M. *on the 24th day of June, 1884*, for supplying and putting in place, complete, in the Custom House and Postoffice building at Kansas City, Mo., a low temperature return circulation steam heating apparatus, in accordance with drawings and specification, copies of which, and any additional information, may be had on application to this office or the office of the superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

IRONWORK.

[*At Peoria Ill.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 31, 1884.

Sealed proposals will be received at this office *until 2* P.M. *on the 23d day of June, 1884*, for furnishing and putting in place, complete, the iron beams and columns required for the Postoffice, Courthouse, etc., building at Peoria, Ill., in accordance with drawings and specification, which, with any additional information, may be obtained at this office or the office of the local superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

JOINERS' WORK AND WOOD FLOORING.

[*At Cincinnati, Ohio.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 27, 1884.

Sealed proposals will be received at this office *until 2* P.M. *on the 8th day of July, 1884*, for furnishing and fixing in place, complete, all the joiners' work and wood flooring required for the Custom House and Postoffice building at Cincinnati, Ohio, in accordance with drawings and specification, which may he seen, and any additional information obtained, at this office or the office of the local superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

IRON AND SLATE WORK OF STAIRS

[*At Kansas City, Mo.*

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., June 5, 1884.

Sealed proposals will be received at this office *until 2* P.M. *on the 20th day of June, 1884*, for furnishing and fixing in place, complete, the iron and slate work of stairways required for the Custom House and Postoffice building at Kansas City, Mo., in accordance with the drawings and specification, copies of which, and any additional information, may be had on application at this office, or the office of the local superintendent of the building.

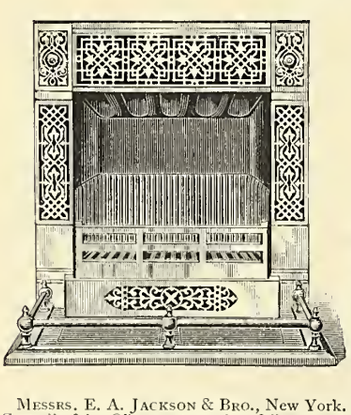
Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

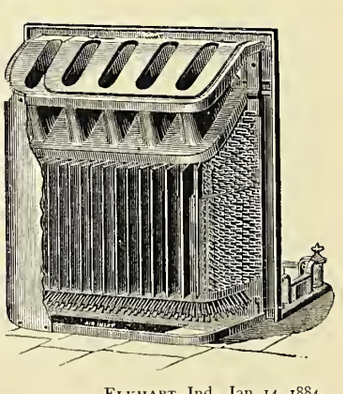
For other proposals see page XI.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.



Heat-Saving and Ventilating GRATE.



WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.

ST. PAUL, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

THE INLAND ARCHITECT AND BUILDER.

Vol. III. No. 6

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IN THE WEST.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on last page of supplement.

Important to Subscribers.

SUBSCRIBERS who find subscription blanks inclosed in their paper are reminded that their subscription expires with this number, and to insure the continuance of the paper they will need to forward renewal promptly. Address The Inland Publishing Co., publishers THE INLAND ARCHITECT AND BUILDER, 17 Tribune building, Chicago, Ill.

To Architects and Draughtsmen.

ARCHITECTS requiring draughtsmen are invited to correspond with or call upon us, as we have the addresses of quite a number of draughtsmen who are seeking employment. It can also be borne in mind, by both architects and draughtsmen, that we proffer them the use of our office as a medium of communication, and all inquiries will receive prompt attention.

RESPONDING to our suggestion of last month that architects favoring the formation of a Western association should send us their names for record, quite a number of names have been sent in, accompanied, in most instances, by an enthusiastic endorsement of such an organization. It is very desirable that the strength of the movement be known as soon as possible, and we hope that those who are in accord with it and have not already sent in their names will do so at once. In the direction of an association that shall have the active support and awaken the profession, particularly in the West, from their present lack of interest in organization, comes the suggestive article, published elsewhere in this issue, from the Architectural Association of Des Moines. Their recommendation that local associations form and converge to a central point in a general organization seems to us of particular value and especially adapted to the needs of the West. Should their suggestions have no further effect than to firmly unite the profession in the West in a central association, that by earnest, active work shall promote all that is good and eliminate all that is bad in the profession, a great good will have been accomplished.

THERE has been a movement inaugurated by a prominent architectural firm in Chicago which, if generally adopted, we feel assured would result in great benefit to contractors. That is the abolishment of the custom of posting bids after a contract is let. The custom is an old one and has led to many abuses, the most important of which is that it has induced contractors to figure against each other rather than upon the cost of work. These posted bids are also often used by irresponsible contractors in the event of a call for a re-figuring of contract. They see how the work was figured and then put in a bid below the lowest figure, in the hope of securing the work and getting even on "extras" before the building is finished. This is the case especially on large work, and will, in a moderate degree at least, account for the largely increased expense of some of our public buildings over the estimated cost. While architects all seem to think this new rule a good one, the contractors are about equally divided. The principal argument in favor of the old plan is that it enables contractors to see that they have been fairly beaten on their bids; but this is nothing less than a reflection upon the honesty of the architect, and there are enough other ways of discovering unprofessional conduct in an architect. The day is fortunately past when dishonesty is common among architects, and with exceedingly rare exceptions the contractors can trust the architect to act with perfect fairness, and base his decision on the merits of the contractor's work, if not on the lowest bid received.

FROM information derived from our correspondents in most of the leading cities in the West and South, it would seem that the amount of building to be done during the present season will not fall behind that of last year, if, indeed, a much larger amount in the aggregate will not be accomplished. In many of the towns and cities it is gratifying to observe that the character of many of the buildings, whether for public or private purposes, are such as afford evidences not only of energy and thrift on the part of the projectors of these enterprises, but also of good taste and the progress of improved culture and a tendency to a higher degree of refinement as well as architectural ability. On the whole, the outlook is very encouraging.

AT the opening of the Chicago Builders and Traders' Exchange, the remarks made by the Mayor in regard to the poor quality of certain brick furnished him by a prominent manufacturer, and the poor material furnished him in other lines, such as cull lumber, poor plastering, painting, etc., and the answer made to his statements by one of the accused builders, are worthy of note, as they show the relative position of the owner and his builder, as well as the usual reasons why we have poor construction. In his speech the Mayor says:

> I know there are a good many tricks in all trades but ours; but I see over there one friend of mine, who built a foundation for me, which sunk down because there was quicksand. He failed to put in solid dimension stone. Another over there, who put in some brick. After a little they were as spotted as Joseph's coat. When I spoke to him about it, he said he didn't guarantee the color. There is another, who guaranteed the best plastering, but when the whiting was put on it burst all to pieces as though it had smallpox. Another feature is putting in the screws. I had to go to work and tie up a building with tarred rope to hold it together.

In his reply the brick manufacturer said:

> Speaking of his experience in building here in Chicago, the Mayor said the lumber was poor, the carpentering was poor, the painting blistered, and the plastering fell to pieces. I do not know that he let the plastering to a cheap man, but I do know that he bought his brick because they were cheap. I do know that he got them for $6 per thousand less than anyone else would sell them.

The owner, as a rule, wants to build cheap. He wants the most solid walls, the most unique and attractive design and the best materials when he first talks of his building with his architect, but a little conversation discovers the fact that he wants a ten thousand dollar building for five thousand dollars; and the architect refusing to try to perform the miracle, he takes the matter in his own hands and hunts all over town for cheap material, and, like our friend the Mayor, when he has secured it he tells how he has been swindled by the "rascally contractors." If owners would recognize the fact that all manufactured articles have their market value, that all labor is rated according to its actual worth, and that cheap material or cheap work means a cheap building, and that the men who use the material are in no wise to blame, we would have less complaint that the brick were off color, or the doors sprung, or the paint or plaster chipped off. The building on the northwest corner of State and Jackson streets, which it is understood was made of refuse brick and other material gathered from all over the city, and which should have been condemned by the city building department before it was finished, should be a solemn warning to all who contemplate the building of "cheap" structures, with a view of saving a few dollars in first cost, and laying the responsibility upon the builders when any "accident" occurs.

IN Chicago there is probably no better gauge of the condition of the real-estate market than that indicated by the activity in the architects' offices. This is because of the growing tendency which is so peculiar to this city, almost every transfer of realty being a move toward its improvement. Therefore, as the building season is one of unusual activity for the middle of July, so is the trading in real estate keeping the brokers at home when they long for a rest from the work of an unusually busy year. Although the fact of the presidential year is supposed to affect this, as all other lines of business, adversely, and the presence of two national conventions favorably, in reality neither of these materially influence the real-estate and building interests of Chicago. There is a natural demand for all classes of buildings which must be met, the old must give place to the new, and so old sites exchange hands, new districts are improved, and even the midsummer dullness cannot interrupt this march of progress. Another strong influence that, though already felt, will have greater influence on the future of Chicago, is the direct result of the late panic in New York. While banks were trembling, and for five days shut out Chicago and refused to send her banks one ounce of specie, the Chicago banks were filling the instant demands of their correspondents throughout the West. The result of this was a thorough loss of trust throughout the West in the financial safety of New York, and a more permanent faith in the money power of Chicago. Immediately after this panic Chicago banks began to withdraw their surplus from New York, and, as a prominent banker privately asserted, with the intention of making it permanent; and instead of New York carrying millions of Chicago capital, and being accounted the money headquarters of the United States, she will in the future hold but sufficient funds belonging to Chicago banks necessary for the proper transaction of business. The addition of all these millions, and it is estimated that twenty millions of dollars have been withdrawn from New York in the past two months, will give Chicago so much more working capital, and therefore it is not surprising that realty is feeling the activity and impetus that belong to what Chicago is fast becoming, the financial center of the United States.

THE proneness of humanity to procrastinate, and the demonstration of the truism that "what is everybody's business is nobody's business," is nowhere so aptly illustrated as in the matter of sanitary measures for public safety. At the present time, Asiatic cholera, like a vast army, is steadily marching toward us, and each day or week that passes may see its vanguard landed on our shores and the work of death begun. Yet there is practically no need for alarm if the proper sanitary measures are taken in time. Cholera, like an army, must have something on which to feed, or it will die. And though it sweeps through the eastern countries like a simoom, if the more northern and more civilized countries will but aid cool winds and healthful atmosphere by removing the decay and rottenness of vegetable deposit and adopt the most ordinary measures in the way of hygienic living, cholera will be made a practical impossibility. But city governments are too apt to wait until the damage is done, rather than by the expenditure of a few thousands effectually prevent the evil; and if this year the cholera sweeps the United States as it did thirty years ago, the responsibility will rest with those who have charge of public affairs. For there is no lack of warning, no lack of knowledge of the greatness of the danger or of the proper preventives, and no lack of money to put those measures in operation, and effectually protect the people from the threatened danger. Let each ward in every city be thoroughly inspected, the streets kept clean, each cesspool and unclean place thoroughly purified, and when we find that we have escaped, rather than deem it a useless expenditure and simply a "cholera scare," say that never was the old adage more fully proven, "An ounce of prevention is worth a pound of cure."

ON the 29th of April, 1859, the late Peter Cooper executed a deed in fee simple of the property in the city of New York, known as the Cooper Institute, to six trustees, to be forever devoted to the instruction and improvement of the inhabitants of the United States in practical science and art. In addition to founding the institution, erecting the buildings, and providing an endowment of $200,000 during Mr. Cooper's lifetime, the institution will receive in pursuance of his will $100,000, and his children will contribute an additional $100,000, which they understood to be among his final wishes. The number of pupils who entered the various classes during the last year was 4,327. An average of 1,672 readers resort daily to the free reading-room. The work of the institution is thoroughly practical, and male and female pupils are fitted at the smallest possible expense to them to become useful citizens. All of the classes and privileges of the institution are entirely free, with the exception of the

amateur class in the Woman's Art Department. Every page of the report is replete with interest, and we have only space to mention that the art department of the evening schools embraces instruction in all branches of drawing — free hand, architectural, mechanical, and drawing from cast; also industrial drawing and design and modeling in clay. The number of pupils in architectural drawing during the term was 260; of these 167 remained to the close of the term and 88 received certificates of proficiency. In looking over this report one cannot help thinking of what a glorious revolution would be wrought in the condition of the people of the United States if every man of large wealth would contribute so generously and work so earnestly and persistently for "the instruction and improvement" of the less fortunate of their fellows as did Peter Cooper. The most imposing granite columns are insignificant in comparison with such a monument as Cooper Union to the work and worth of a human life. The possible results — the refinement, the comfort, the concord, the happiness, where else would be ignorance, squalor, wretchedness, vice and crime — in short, the millennium would indeed seem to be very near, if all men of large wealth were to emulate the illustrious philanthropist, the founder of Cooper Union.

AGITATION is being made upon the future outlook in ocean travel. The new steamers plying between this country and Europe, and many of the old, belong to what might be called the seven-day class, and are bound to have a full list of passengers every trip. But the owners of a vast number of those less swift will soon be trying to discover what to do with their slower and therefore less popular vessels. The more natural result will be a cut in rates and an increase of travel, and in this event two important points will have to be closely watched, both by the steamship companies and government inspection. One is that all vessels carrying passengers shall be fortified by airtight compartments, and the other that the rate of speed shall be regulated and kept within the capacity of the vessel's machinery, that no sacrifice of safety be made to gain a few hours' time.

WE are glad to know that several of the leading architect offices have adopted our suggestion of giving the draughtsmen a half-holiday on Saturdays. The benefit to be derived is important to the draughtsman and his employer. With one afternoon in the week the draughtsman can inspect the current work upon his boards in the building which he has designed; he can go upon sketching tours, picking up new ideas, and gather as he walks the rest and exercise that will come from a break in the monotony of office life. It will not only intellectually and physically benefit the draughtsman, but, what is to many employers more to the point, benefit the pockets of those architects who are willing and able to give their workmen these hours of recreation and study. Of course in extremely busy seasons the rule could be suspended, but architects will do well to consider the matter and assist these draughtsmen to become practical as well as theoretical.

THAT the National Convention of Master Plumbers has, thus early in the history of its organization, recognized the so-called West as the center of the building interest in the United States, and transferred its management to the West, electing its president from Chicago, and by vesting in the president the chairmanship of the executive committee, practically making Chicago the headquarters, is an indication of how strong the West is growing, and independent of the East. Still, there should be no separation of interests. In the actual work of the association there should be no West and no East, but a grand whole, each seeking the welfare of the profession as a whole, and filling that grand mission which, next to the medical profession, is given to plumbers—the care of the public health. The association cannot take too high a stand in the matter of sanitary elevation. All honor to those active spirits who have drawn their profession in the United States together in permanent organization—an army for the protection and safety of the public health.

The Sanitation of Cities.

ESSAY ASSIGNED TO CHICAGO MASTER PLUMBERS' ASSOCIATION BY THE NATIONAL ASSOCIATION.

BY ALEX. W. MURRAY.

WE have in use two words in reference to the care, preservation, and the like, of health; one of these is "Sanitary," and the other "Sanatary." The first is the one most generally in use, and covers all that may be necessary in this article or any other one which treats of sanitation. The one has more especial reference to a system; the last named, or sanatation, to the means which are put in use to produce beneficial sanitary results. To avoid useless employment of words, let us adhere to the word most commonly in the vocabulary of our profession, to wit, sanitation.

One of the very material elements in the sanitary condition of a city is a location, much depending on an elevated and flat site, and all having reference to facility of drainage. Other things being equal, a high situation is far preferable to a low one. Abundance of pure water is another requisite to a good sanitary condition. But while a good site and plenty of pure water are essential to good health in a city, they constitute but a small part of all the material requirements.

One of the great faults of most modern cities is to be found in the irregularity of the streets, and their narrowness. It is much better that the streets should be regularly laid out, so that the sun can penetrate all parts; and the result is still better where the streets are made wide, so that the air and the sunshine can penetrate freely to all parts of them. In this direction, there is growing a vicious innovation which has come into existence since the discovery and the general use of the passenger elevator. This is the construction of very high buildings; these with narrow streets have a bad effect, for the reason that they exclude the sunlight, and leave the streets beneath but little more than dark, damp, unwholesome passages. As it is not within the means of the sanitarian to remove this difficulty in the shape of lofty buildings, he must needs adapt himself to the situation, and labor to deal with the difficulty as it now exists.

It might be possible to awaken public attention to this evil, and through municipal regulation secure a limit to the height of buildings; a limit which should depend on the width of the street adjacent, or the distance from other structures, and in this way some amelioration of the difficulty would be effected. It is apparent that a very high building standing in an open space would be less damaging than one which stands on the street line, and has buildings on the other sides. The problem is a difficult one in old towns where the site is built up; about the most that can be done is to attempt to stay the evil at its present state.

In towns yet to be laid out, the constructing of wide streets and the prohibition of very high structures in continuous street fronts can be procured. In the cases of these, and also in those of additions to towns already laid, it might be practicable to have a somewhat different arrangement of blocks from those constructed in the ordinary way. They might be so built as to leave air-passages between various buildings, through which there would be always such a movement of the air, and such an admission of sunshine, as would secure maximum sanitary results. A street should never be less than 100 feet wide where perfect air and sunshine are desired; and if this fact be understood at the outset of the construction of a city, it can be done without difficulty. The blocks should be as small as possible, and the alleys thereby avoided.

No time need be expended on the nature of filth. All know that filth, ignorance and crime are inseparable. To remove filth is to remove a potent provocative of degradation; a degradation which fills our infirmaries, our prisons, which makes bad citizenship, and which, by its tendency to poverty, decreases the taxpaying power of the people, and thus acts even on the national treasury.

It may seem strange, but it is the fact, that one of the most powerful obstacles in the progress of the sanitary progressive is to be found in the landlord, and who is at the same time a capitalist. Sanitary improvements cost money; he may be willing to incur the expense in his own residence, but is rarely agreeable when the same care and outlay are demanded in the construction of residences for tenants. What is especially needed in this direction is the education of public opinion to a point where sanitary measures and laws are thoroughly understood, and then, if the rapacious landlord will not heed these, he should be forced to perform his duty by law. A man has no more right to place people in situations where they will be poisoned by filth and bad air than he has to place prussic acid in their food. It is essential that there shall be such sanitary regulations that no man shall be permitted to do aught that will endanger the life or the health of either himself, his family, or that of his neighbor. Health is more precious than wealth; in fact the former is at the base of the latter; why, then, should not the laws for the protection of the one be as stringent as those for that of the other?

It is a suggestion worth considering as to whether it would not be to the advantage of cities to have the generation of power for the running of machinery located outside the limits, so that by this means to avoid the

charging the air with the products of combustion. The time may be distant when this suggestion may become practical, and yet it is within the possibilities of this progressive age; of its value there can be no question.

An especial feature in which the French cities are superior to ours, and to some extent also the English towns, is in the provision of urinals on the principal streets. These should be provided not only as a matter of comfort, but also as one of health. In addition to these there should be water-closets and bathing-places; the latter to be frequent in location, and furnished to the public at a small cost, say five cents per head. In this way, cleanliness of person would be cultivated, and this improvement would strongly reinforce sanitation in its application to the household and the streets. Public parks play an important part in the sanitary welfare of a city.

Within certain limits, foliage plays no inconsiderable part in preserving the health of cities. It affords a grateful shade in heated seasons; it is claimed to absorb poisonous carbonic acid gases; it tends to preserve the air from the dusty dryness peculiar to some portions of the summer, and its roots are of value in the absorption of water from the subsoil and which often contains deleterious matter in solution. Trees should be plentifully planted, but not in sufficient numbers to shut out too much of the light of the sun. In all cases a house which is surrounded by trees should have the latter so arranged that the sun can pierce through in spaces sufficiently numerous and wide to permit the sun to reach every portion of the house.

In the construction of sidewalks and pavements, care should be exercised that all are water-proof, and the rain be carried off to the gutters; to prevent injury to the eyes, the color should be of a greenish hue. A pavement that permits the surface to absorb excrementitious matter, where it lies and undergoes putrefaction is an element of danger in a community. Akin to this is the question of the disposition of garbage. Many plans have been suggested in this direction. Perhaps a feasible remedy could be found in treating the garbage as it accumulates, and before its removal, by some process which will arrest decay, or which will have the effect of a disinfectant. It is certain that under the method in vogue in many cities in which the garbage is left to broil and fester in the sun for hours before its removal, is one calculated to produce evil consequences of serious nature. It is a matter so easily remedied that there is no excuse for permitting the evil to have a permanent existence.

There is much liability to infection from sewer-gas in the case of foods stored in basements and sub-cellars. The greatest care should be exercised in these matters, and wherever possible the ground-floors should be covered with a rigid layer of asphalt or cement. Another thing needed about the house is something in the nature of a measurer of the purity of the atmosphere, and which should indicate its sanitary condition with the same certainty that the thermometer shows the degree of heat, or the barometer the weight of the atmosphere.

In the attempt to secure the highest sanitary results in a household, the use of water is of the most essential character. Many other inconveniences, and even positive unsanitary conditions, may be endured with less danger to health than the deprivation of the abundant use of water. It washes out the drainage pipes; it absorbs and neutralizes many of the poisonous organisms that are bred in the fœtid cell-life of "*bacteria*" and other parasitic elements. Water in plenty, in profusion, should be supplied in every city, and its plentiful use — not its waste — should be encouraged. Cleanliness is next to godliness, and he is a good christian who spares no pains to make his own residence a healthful and beautiful home, and in doing this not only sets an example to his neighbor, but assists in preventing the origin or the spread of unhealthful agencies.

What is needed among householders is common sense. It is of the commonest order to find that the owner of a house will spend every spring large sums of money in refitting and refurnishing his house, and all for the benefit of that which is to meet and please the eye. He never possibly thinks that one of the most vital points in his home is located in the dark earth, beneath, where all sorts of mysterious chemical processes are in constant operation, where nature's chemistry is decomposing particles of matter and changing them into noxious gases, and they in turn are becoming vehicles for the transportation of deadly organisms through pipes and crevices to the air above. He never thinks for a moment of this underground laboratory with all its possibilities of harm, or asks whether it, too, does not need repair, or looking after. Out of sight, out of mind. Some day a mysterious malady invades the household; the doctor is sent for; he finds the cause located in a vitiated atmosphere, and then in a physician's bill, or in that of the undertaker, he pays out fifty times what it would have cost him to have had his drainage examined at intervals and its working kept in perfect order. We need laws, to be sure, to make people save their own lives; but we need more the general education of the public up to a point where they will exactly comprehend the meaning and requirement of sanitary science.

While there needs to be some common sense hammered in the head of the citizen, there needs to be a good deal done to advance the learning and requirements of many of the workers in the field of sanitation, as well as those who are directly interested, as those, who, like the mason, the carpenter, and the plumber, have an indirect interest in the securing of the best sanitary results. There has been a decided improvement in our own profession. The time has passed when any plumber is willing to assert that he knows it all, or that when he left his apprenticeship he had been taught all that there is in the business. Men who are willing to progress beyond the point where they were brought by the master of whom they learned the trade are seeing that there is a broad road which few have trodden, and which leads toward perfection. There should be among the technical schools, which are now becoming the fashion, a school for the plumber, which should teach him not only the practical details of his profession, but its theory, the mechanics connected with it, and such chemical knowledge as may be essential to securing an educated workman. At the same time that the plumber is receiving the benefit of a training in his trade, there should be something done to educate, or at least to partially civilize, the average owner. The plumber who is asked to do a thoroughly first-class job may be often met; but the one who is asked to do this, and at the same time is offered a first-class price for his labor, is the rarest of occurrences in the plumber's experience. Men who build will cut down everything which is not in sight for the sake of ministering to the eye. They wish something which they and the world can look at and enjoy; what is not to be seen is not regarded. The plumber is not a philanthropist; the very most he can do is to honestly put in a job what he is paid for it, minus a reasonable profit; and it is he who is cursed, and not the wretched parsimony of the owner, when devastation and inconvenience follow the plumbing of a house.

A duty the trade owes to the public, and which should be immediately agitated, is the establishment, by the authority of the state, of a board of examiners, to pass upon the qualifications of those who are to be granted a license for the purpose of practicing the business of plumbing. This board should consist of men who have a thorough knowledge of the theory and practice of plumbing (and they should not be removed from office except for cause), as suggested by Dr. DeWolf, Commissioner of Health of Chicago, in his late address before the Chicago Master Plumbers' Association: Is it within the province of the National Association to prepare a memorial address to the U. S. Congress, suggesting the propriety of the U. S. Government appointing a commission of practical and scientific men, whose duty it would be to investigate the practice essential to the perfect sanitary construction of a building in the different sections of the Union, and to establish a sanitary code, based upon the experience thus learned, best adapted to a certain defined section?

If parsimony in the individual is productive of bad results, it is equally so in the management of the affairs of a city. There should be no "scrimping" of the public's money whenever there is a demand for its use by a competent board of health. Perfect cleanliness of street and alley should be secured; nuisances should be as vigorously suppressed as if they were cases of cholera or smallpox. For this, money is needed, and it should be given. In the matter of the sanitation of cities, liberality in the use of money is absolutely essential to good results. All our large cities have their bridewells crowded with dissolute and robust prisoners. Let these be placed on the streets and forced to labor, to keep the public places clean, and in this way they will not compete with honest workingmen, and by their devotion to the work of cleanliness they will compensate somewhat for the uncleanliness of their own immoral lives.

It is impossible in an article of the character of this to lay down all the details which are necessary to be developed in the perfect sanitation of a city; all these would require a volume. The most that can be done is to endeavor to awaken public opinion to the necessity of sanitary reform, and by constant iteration so imbue people with the proper ideas, that the observance of sanitary rules will become in the nature of a habit. Men are not so ignorant in these respects as would seem to be the case; but they are careless and indifferent. If the evil results of their carelessness could be limited to themselves, it would not be so much a matter of regret. Unfortunately, the main sufferers are innocent children, who are slowly but surely murdered every year by the thousands in the great cities.

The family physician has a part to play in this drama of household life. It is he who, more than all others, can reach the comprehension of the heads of the family. He can point out the danger and insist on the remedy; and when he, in the language of the learned sanitary engineer and plumber, James Allison, of Cincinnati, shall take his place in the happy trinity of Doctor, Architect and Plumber, then will the sanitary millennium have made its appearance.

Stained Glass.

BY FRANCIS LE BARON.

TIME out of mind stained glass has been used in ornament. It has added a grace to architecture, a solemnity to religion, and has vibrated in harmony with the highest note struck by gaiety and pleasure. Cathedrals owe to it their dim religious light, and halls of rejoicing and enjoyment shine brighter in its effulgence. It gives dignity and refinement to the great halls of trade, it sends a golden shower of light into the banking-house to "gild refined gold," its purple radiance pours through royal houses, it shines above the dead like the "golden stairs of heaven," and the humble household has its brightly tinted window, at sight of which the baby laughs and claps its hands, and reaches from its cradle or from its mother's arms to grasp the shining treasure.

It is, and always has been, the efficient handmaiden of architecture. In the vast rock-tombs of Egypt we find its shining fragments, and in the solemn gloom of her titanic architecture a sudden flash of radiant windows would appear like a dash of wild roses on an alpine crag, like a crown of jewels on a royal brow, or rather like a diadem of stars on the forehead of a god.

Gothic architecture knew how to clothe itself with this wonderful radiance, knew how to set within its walls those glowing pictures painted with the sunbeams; to raise them over its high altar, to unravel the white light, the very garment of God ("He clothes himself with light as with a garment"), and place it as an altarcloth upon its altar before the symbol of its incarnate Divinity. The worker in stained glass should be a consummate artist. Other painters must use pigments to interpret their thoughts; his interpreter is the light itself, he draws with the pencil of the sunbeam, and the sun alone grinds his paints and spreads his colors.

The various methods of glass treatment are called "Mosaic," "Painted," and "Enamel." Glass that is of one uniform hue is called "*stained*," and when color is applied to the surface of colorless glass, and then burnt-in, it is said to be "*painted*." In the "enamel method," as it is called, the whole picture is painted and burnt-in on the previously colorless surface; while in the simple "mosaic method" the picture is composed of pieces of stained glass. In the "mosaic-enamel method" both processes are used.

What is generally called "mosaic glass" has really some of its details and shadows marked by colors, and of this kind are the earliest windows of the eleventh and twelfth centuries in France; for though composed

of colored pieces of glass, held together by the leads, which form the outline of the designs, the shading is made by lines in bistre, laid upon the surface and afterward burnt-in; and the same color is used for some of the details and folds of draperies. A new invention in staining glass in lines and shadings of color is now used for skies and draperies, and the opalescent tints, which are so beautiful and so effective, have opened an entirely new field of design in stained-glass work. The art gradually grew out of the original, simple mosaic process, but it has long been a question when and where the first idea originated of adding the few shades and bistre lines, for in that was the germ of the enamel process, and *the real origin of painted glass.*

Another process, which is rarely used, consists of welding two or three plates of stained glass alternately to two or three plates of colorless crown glass. A specimen of this treatment was found in the abbey of Königsfelden, near Burgg, in Switzerland. It consists of six plates, three of common greenish glass and other three of stained glass of a reddish pink color. The effect of the combination was a very pale pink, different from that of the plates, so that by this process any tint whatever may be produced. This specimen, after being cut and polished on the edges to show the combined plates, was presented to Sir Walter Scott, who fitted it up in a stand, and it is probably now at Abbotsford.

The choir of the church at Königsfelden is lighted by eleven colored glass windows, by the light of which are displayed the portraits of all the knights who fell in the battle of Sempech.

Windows of stained glass seem to have been used in the fourth century, in the age of Constantine, and probably a century earlier. From Bysantium,—the repository of all the arts after the age of Constantine,—colored-glass windows passed into the west of Europe. About the year 400 they were used in the San Paolo-fuori-le-mura at Rome, built by Constantine; and in the sixth century in the apse of San Giovanni Laterano, at Rome. Before the eleventh century they were employed in France, and in Flanders and Germany in the twelfth century.

Although there can be no doubt that we owe to the Bysantine Greeks the art of painting on glass, yet the French had the merit of bringing the art to a perfection which the Greeks could never have attained, and of giving to the painting a brilliancy which constitutes its real merit.

The best specimens of colored glass for style are the mosaic windows of the twelfth century. The thirteenth-century glass is often richer in color, but inferior in the arrangement and character of ornamentation. The merit of the windows of the twelfth century is their perfect harmony with the general effect of the edifices to which they belong. They were a part of the architecture, integral portions of the buildings themselves, not stuck in as an afterthought because they were "pretty." The building committees of those grand old buildings did not advertise a competition for the stained glass, nor say, "How much work will you do for so much money?" nor dilly-dally week after week, till the artists' patience became threadbare and their enthusiasm was turned into disgust.

In the middle of the fifteenth century the revolution in the art of painting upon glass was complete. Thenceforth glass was nothing more than the material subservient to the painter, as canvas or wood in oil painting. Glass-painters went so far as to copy on white glass, as upon canvas, the masterpieces of Raphael, Michael Angelo, and the other great painters of the Italian Renaissance. We also find entire windows painted in monochromatic tints. But the era of glass-painting was at an end. From the moment that it was attempted to transform an art of purely monumental decoration into an art of expression its intention was perverted, and this led of necessity to its ruin.

In the mosaic windows are placed a series of medallions or lozenges — circular, oval, or of other shapes — containing Scripture subjects, and surrounded by a colored mosaic ground; the medallions, with a rich border, form the whole window, and hence they are called "*medallion windows*," to distinguish them from "*canopied windows*," which contained the figures of saints under canopies. Very fine specimens of the medallion windows are found in the cathedrals of Rheims, Chartres, Bruges, Auxerre, Sens, and the Sainte Chapelle in Paris.

It was in the latter part of the thirteenth century that corruption crept into the art of stained-glass work, and the colored-glass windows assumed gradually the character of large pictures, until, in the fifteenth century, the whole window, though consisting of several lights, was covered with one picture; and mosaic yellow canopies and monstrous transparent columns, with other architectural accessories, defied all harmony of color, proportion and possibility. In the middle of the fifteenth century the revolution in the art of glass painting was completed and its era was at an end. Glass, as I have said, was merely the ground that a painter substituted for canvas, and the works of Raphael, Michael Angelo, and other great painters, were copied upon white glass.

We take from Sir Gardner Wilkinson, as a guide to those selecting windows who are not blessed with taste of their own, the following list of conditions or properties of colored-glass windows:

They should be subservient to the general ornamentation. Their object being decorative, they should assimilate to and aid the decorations and style of the building.

They should not be a contrast to a white wall, nor pretend to be a painting or large picture.

The small figures in the medallion, though conventional, should be good, not imitations of a rude style, and should be part of the colored effect of the windows when seen from a distance.

Broad, opaque shadows should not be introduced, nor an attempt be made to convert the flat into a round style.

Figures larger than life should be avoided as injurious to the proportions of a building.

No great expanse of one color in one place should catch the eye, and a picture extending over two or more lights, cut by an opaque mullion, is inconsistent and offensive.

A quantity of white glass is bad and poor, and yellow is better than white for preventing red and blue from appearing purple at a distance.

The border should be in proportion to the size of the light.

Too small, and even too large a quantity of ground between medallions, should be avoided.

The medallions should not be all of the same form, and the patterns should not be too small nor have a spotted appearance.

The primary colors should predominate over the secondary and tertiary.

The best windows for imitation are those of the twelfth century.

In rosette windows, the tracery lights, or openings, should radiate from the center rather than be concentric.

Colored glass is not required in buildings of the Renaissance style.

How far stained glass may be used in dwelling-houses is a question to be decided by a good architect. In hallways and on staircases, where it is seen only in passing, it is beautiful and desirable. Whenever it is desirable to shut out an unpleasant prospect,—a vacant lot, a stable, a back-yard an alley-way,—its use is evident; it is admissible as a delicate border around windows in living-rooms; but then the work should be especially fine and artistic. In apartments commonly occupied by the family, and in which they work and read, windows of stained glass would be wholly unsuitable. Even in dining-rooms it should be sparingly used. An artistic panel over a sideboard is very ornamental, but our guests and friends are not improved in appearance by being seen with purple hair, or green noses, or yellow lips, or variegated foreheads. The vulgar combinations of cheap stained glass that are stuck into every window of every "flat" are simply abominable. They corrupt the taste, for by constantly looking at them we grow to like them,—

> "Vice is a monster of so frightful mien
> That to be hated needs but to be seen;
> But seen too oft, familiar with her face,
> We first endure, then pity, then embrace."

And this style of stained glass is simply "vicious." In rooms containing pictures, or objects of natural history, or of vertu, colored-glass windows are always inadmissible.

Colored glass would be inappropriate in churches of the Renaissance, painted with large frescoes, where the color from the windows would interfere with their effect. Nor would painted glass be suited to a building of the Gothic style, decorated with fresco paintings, such as Giotto's Chapel at Padua. In such buildings the windows necessarily consist of colorless glass in order to admit the light required for that kind of decoration. When colored-glass windows are used, the building should be painted in harmony with them.

Stained glass has come into such general use of late that the firms who work in it are legion, and much good work is executed. The twenty firms who entered into the Board of Trade competition are all prominent firms in the country; still I do not think it will be invidious to say that the names first spoken of in connection with stained glass are Donald McDonald in Boston, Tiffany and La Farge in New York, and two or three firms in Chicago.

Donald McDonald is a great artist in glass, using it as a great painter uses his pigments—to produce effects full of dignity, grace and beauty. Some exquisite specimens of his work are found in the best houses in New York and Boston. In the McCormick house on Rush street, there are some fine panels of his work, and Mr. Leiter has one in his house at Lake Geneva.

La Farge designs in glass with the feeling and refinement of the fine-art painter, which he is, and of the first rank. He gains his effects, as does McDonald also, both by the mosaic process and by enameling. The windows of the grand staircase in Wm. H. Vanderbilt's house in New York, are a fine specimen of his work. The transom for one of the windows in the Board of Trade Hall,—the only one completed,—also executed by La Farge, and entered in the competition, is very beautiful. It represents "Fortune."

Tiffany claims to gain his effects entirely by the mosaic process. He is very much the fashion, and he gets strong effects; there is a barbaric splendor about his work that is almost brutal. The glass in the side entrance of Wm. H. Vanderbilt's house is Tiffany's work,—supposably at his best. It is a cataract, a Niagara of jewels, very gorgeous; but having said that, you have said all. He seems carefully to avoid refinement of color and delicacy of design. The work of the best Chicago artists is so frequently described in the current numbers of this journal that present reference to the many artistic productions of these firms would be superfluous.

Of Interest to Draughtsmen.

Warm water is better than cold for rubbing up Indian ink. When it becomes necessary to trim a piece of rubber it will be found that the knife will cut much more readily if dipped in water. When paste is used to fasten papers to a board, both sides of the paper should be dampened, as the paste takes longer to dry. In sharpening pencils, be sure the knife-blade has a good edge. Many a pencil has been half cut away from the blade being dull, on account of the undue pressure necessary. Stale bread makes an excellent means of cleaning up a drawing. It will hardly remove pencil lines of any strength, but it clears up the surface beautifully. Avoid the crust, as it may dent and scratch the paper when rubbed upon it. In selecting a pen, care should be taken to see that the nibs are of the same length, and that they are of sufficient thickness. In some pens the metal is so thin that the nibs really cut into the paper; and another disadvantage is, that in using the very moderate amount of pressure necessary to keep the back nib against the ruler, the two surfaces of the metal become nearly in contact, and the line becomes uneven. A fine pen will not necessarily make fine lines; a pen of medium size, if in order, will work as finely, and the larger handle is more convenient to hold.

THE collection of American woods made at the expense of Morris K. Jessup, of New York, and under the charge of Prof. Sargent, will soon be completed and presented to the Museum of Natural History in New York city.

The Chicago Builders and Traders' Exchange.

THE inaugural meeting of the Chicago Builders and Traders' Exchange was held in the new rooms of the association June 26, and was attended by all the prominent builders of the city. The time was wholly occupied by addresses, and the discussion of a generous lunch set before the invited guests by the association.

The meeting was called to order at 11.15 A.M., by President Geo. C. Prussing, who addressed the members as follows:

Gentlemen: It affords me pleasure to welcome so large a number of members and visitors here today. In calling you to order for the first time in these rooms, an opportunity offers to speak about the foundations of the pyramids, or the topping out of that ancient landmark, the tower of Babel. What is there to prevent an introduction to the secret recesses of an oriental Harem? The field is unlimited — the opportunity tempting — and I would be inclined to embrace it if I did not see those among our invited guests better able and doubtless ready to entertain you.

In this assembly I need not mention the marvelous growth of our own Chicago, not excelled in rapidity or beauty of architectural design by any other city, modern or historic. The quality of the work of its builders is attested at every hand by its monumental business structures, its palatial residences and spacious factories; it challenges criticism and fears no comparison. When I say builders, I include all whose work enters into the construction of buildings — the architect who designs, the artisan who executes, and the manufacturer who fits for their various uses the materials required. But to them you need no introduction; nor need the volume of building business be enlarged upon. That it is larger than in any other place in the known world our friends of the press will figure out and prove to our common satisfaction on new-year's day next, as they have done for so many years back. They will figure out, within an inch or two, the height of a column you would have were you to pile, one upon another the three hundred and fifty millions of brick made and used in this city. They will give you the exact number of times a railway train loaded with the lumber handled here in a year will reach around the globe at the equator, and in numerous other ways will impress on you the fact that the building business of Chicago is immense. I will not steal their thunder. Let us admit that it is large.

For the accommodation of the multitude engaged in this important branch of trade, a place and hour to meet on common ground was deemed desirable. That it is recognized as an absolute necessity is proved by the long roll of members already on our list. Over four hundred firms, comprising the longest established and best known in every branch of building trade and manufacture hold membership tickets in our Exchange on this its inauguration day, and new applications are received continuously. The Exchange thus established will be the headquarters of all builders — the center of the building trades. From 11 to 12, during the Exchange hour, a representative of each live firm will be on its floor, within easy reach of architects and customers attending to their buying and selling and incidental business.

The committee on membership has exercised due care in the admission of applicants. The bylaws provided for the expulsion of any found guilty of unbusinesslike practices, and, from what I know of the gentlemen comprising your present Board of Directors, I feel safe in saying that the provisions of the bylaws will be strictly enforced.

Thus we believe it will not only be found an advantage for all connected with the building business to be members of the Exchange, but that ere long it will be a measure of reproach to have it known in Chicago that a builder is not admitted to membership therein.

A word about these rooms. We have endeavored to provide the most centrally located, and easily accessible to all; have fitted and furnished them for business, and shall try to meet every necessity and reasonable requirement for its speedy transaction. We trust our endeavors in this direction will meet with your approval.

Gentlemen, I thank you for your attention.

The president then introduced the Mayor, the Hon. Carter H. Harrison, who spoke as follows:

Mr. President and Gentlemen of the Exchange: The desire of the committee that I should come down and help you open this new room, and inaugurate the Builders and Traders' Exchange, shows a laudable desire on their part to commence right, that they may go right afterward. [Applause.] They want the Mayor of Chicago (not Carter Harrison, but the Mayor of this mighty city) to start the ball in motion, and say a few words of encouragment to you. I was a little startled when your president started out to make his speech. When he spoke of the foundations of Chicago, the pyramids and the tower of Babel, and, further, said we might go into the recesses of an oriental Harem, and then said he might embrace the subject, I rather thought he was getting a little off the subject. [Laughter and applause.] A thought came to me that I would have to check him if he would attempt to embrace the Occident and all oriental harems. We have no such thing here for him to embrace, therefore you must embrace true business rules, and perform your business with regularity and honesty.

I am glad the builders have met together. I know there are a good many tricks in all trades but ours. I see over there one friend who has helped to build a foundation for me, and it sunk down because there was a little quicksand at the bottom, and he failed to put in a solid dimension stone. Another over there put in some brick, and guaranteed them; they were as spotted as Jacob's frock was; but he said he did not guarantee the color. There is another who guaranteed a job of plastering, but when the plaster was put on, it burst all to pieces, as though it had smallpox. Another, a carpenter, made a failure putting in some screws, and I had to go to work and tie up the building with tar rope to hold it together. No such business will exist now. My friend Purington will never sell me any more brick not fully ripe. [Applause and laughter.] I feel that Indiana brick, sold by Chicago men, will be all that is claimed for them. He told me all the bricks were got down in Indiana, and you know you cannot trust Indiana Hoosierism. [Applause and laughter.] An Exchange of this kind is calculated to do a great deal of good. Not only will it facilitate the means of intercourse with each other, but you will become better friends here, and always be ready to act together in matters which will be for your mutual good. All I ask of you is, that you be honest in your trades and estimates; and when you propose to do work, let it be done in good faith; and if any do wrong, let others expose the wrong, and all combine to break up bad habits, and bring all to the exercise of greater care. You will have an immense advantage and can better protect the higher interests of members. You will be acquainted with the needs and conditions of the various building trades, and you can be influential in establishing legitimate trade organizations and in preventing strikes. In a city taking a course leading to strikes, you will consult together in your own affairs, and appropriate not more than is due, but give fair wages and exact a fair return for labor. You will have the opportunity to indulge in different styles of architecture, because, I believe, you can admit you have many good architects, as well as grand architecture. You yourselves know these men, and under whose direction the foundations are being laid almost as solid as the pyramid of Cheops. What is to become of this mighty city planted here in the midst of this greatest grain field in the world, capable of feeding millions of people from the fields around, with railroads leading to every port in the United States, there meeting ships that go to every point on the globe? We have reason to believe, and it is no boasting, that Chicago is coming on to a population of from one to three millions of people. I believe today that there are men in this hall who will live to see fifteen hundred thousand people in Chicago. I recollect when I came here, twenty-nine years ago, a man who spoke of Chicago, of what Chicago is today. William B. Ogden pointed out the canal, and said: "Young man, you will live to see steamers coming into Chicago and running to New Orleans"; and further said, "you will live to see the day when land will be sold on the Desplaines river by the foot and not by the acre." The Illinois and Michigan canal is not yet completed, but the Government will take it in hand, I believe, another year. The Desplaines property is sold by the foot. Going on as we have gone, our city is to be a vast one. Let it be your duty to see that the buildings put up here will endure, not for a day, but for all time. Put on the corner-stones your names, and have the arches and architecture so firmly built, that a hundred or two hundred years hence your names may be read as the builders, and thus go down to fame. Do your duty. Do all things well. Chicago affords you what no other city can offer. I congratulate you, therefore, upon the opening of the Exchange, and that you have met here together as you have met in this entire work, and hope that all unfairness may depart at the door, and that none but fair work may be demanded. And, gentlemen, when I come to build for the city, if you think any of you can bid a little lower because I have been "the best Mayor of Chicago," I will be pleased to ask you to bid low for me. Gentlemen, once more, in the name of our people, in whose behalf I am here to assist in the opening of this Exchange, I congratulate you. I hope and believe, from my knowledge of men in Chicago, whom I have associated with, that building will be better. I want to say to my friend Purington that I, too, have been a brickmaker, and over in St. Patrick's church are some of my brick, and they stand well. Purington, do your duty. [Applause and laughter.] I can trust you in all things but two,—that is upon your bricks and black politics.

Mr. Gurney being called for, was introduced by the president, and said:

Mr. Chairman and Gentlemen of the Association: I want to say before the Mayor goes out that he helped to open the Exchange in a room not far distant from this. He took the first steps in opening it, and I am glad that he is feeling nicely, occasioned not only, I hope, by the opening in the other room, but simply by the good feeling manifested here today. I am not a builder, and think I should have very poor success in the designing of a building; but there are certain principles connected with it that men cannot ignore, if they expect to reach a position where their business will be respected. By the advantages of this Exchange, men and architects may have protection. We should know more of the business if a record had been kept in communities, and it is not only by the failure of individuals but of communities to keep a record of their business that these things have been lost to the world. It is not more than seven or eight hundred years since the work of associations of men coming together in their common good and interest have been preserved to the world. We find back in the middle ages where men commenced to come together to attend to things for their mutual protection. In Asia, Europe and Africa we have some evidences of the difficulties they met with, and monuments of their industry, wisdom and perseverance. I believe, firmly believe, that every institution traveling upon certain lines of industry should be organized. But the great trouble is, our inevitable conflict of evil with good in any time and place. So often does greed take the place of honesty and integrity. This has been the trouble as far back as we know. It does not exist simply in organizations for mutual benefit or friendly meeting, but it exists in politics and theory, and everything that concerns the people. This organization is the result of our civilization. The organizations which exist are all results of our civilization. Now, gentlemen, I am not very old—not quite as old as the Mayor [laughter]—he is older in a great many things than I am; he can beat me out of sight in politics, out of sight in a great many things. But one thing if any, that he has impressed on my mind is, that in a city government integrity should be the rule, if nothing else. Everything that is right in the city government comes in the interest of the people. When an individual or an organization, I care not which, departs from the straight line of integrity they become a detriment to the community. There is one hour appropriated to carry on business, and the principles of business direct that this hour should be devoted to it. I was glad to hear the president say that any man whose conduct was wrong would be expelled. I congratulate you, Mr. President, and I congratulate the men


CHESTNUT STREET BAPTIST CHURCH LOUISVILLE KY
H.W. VOLTERS ARCHITECT

here that you have come together, and that this day marks a new era in the building business of Chicago. There are, as the Mayor said, young men in this building today who will see in this city fifteen hundred thousand people. Never was there a city where progress was so rapid, and its progress so gratifying to the people. We want this organization, and every man among the trades, the people, and the artisans, to feel that this movement is sure to prove a blessing. But if they become an organization to be handled by a dozen men, in which the people cannot have any confidence, they become a curse. I have no trade. If I knew how to make a brick, how to make a waxend, or to lay out a building, I would be glad. There is no organization that I would unite with any quicker than this Builders' Association. [Applause.] I am very glad to be here, and it has afforded me great pleasure, but I thought I would like to hear from some of your own men. You have got good men here who are better able to entertain you. I hope you will introduce some of the members of your organization.

Architect W. L. B. Jenney, in response to calls, delivered a practical speech, which is condensed as follows:

Mr. President and Gentlemen: The inauguration of this assembly, composing the enterprise of our building fraternity, is the inauguration of a new era in the building of Chicago. Your meeting here in Chicago will afford new opportunities for friendship and good fellowship that cannot fail to elevate the moral standard of all business competition. The opportunities thus afforded for the exchange of views and the discussion of things of importance and questions that arise in every grade of building enterprise cannot fail to be greatly beneficial. Architects well know, at least those who have had a few years' experience, what a fund of information there is in the minds of experienced builders—information not to be found elsewhere, and which they can readily obtain. This object can be attained by an evening each week for a lecture, to be followed by a discussion of the points brought out; for there is nothing that will make the meeting more interesting than the discussion after the lecture. In fact, the way to make men's brains enlarge is to put something into their brains. This association is not inaugurated too soon. We have already felt the want of a union of the building interests. Seventeen years ago, when I first came to Chicago, the main part of the city was comparatively small; the main street was Michigan to Twenty-sixth, and west on Washington to Union Park. But a change has taken place within a few years. The citizens then seemed to be here to make money and to spend it elsewhere. While such a state of things existed, permanent architectural structures could not exist. Chicago has gone through every phase of existence, from the old log cabin of Fort Dearborn to the great Pullman building, which is from the one story to the ten and twelve. A few years ago a four-story building with limestone front was considered a fine building. Today we build of brick from St. Louis, Trenton, Philadelphia and Baltimore. Our stones are brought from Wisconsin, the east and extreme north of Lake Superior. In fact, I have in my office today some forty specimens of stone furnished to Chicago builders. Ten years ago we calculated that there were eighty pounds to the square foot; today we must estimate on one hundred and seventy-five. Our workhouses today must be calculated for three hundred pounds to the square foot, and the whole works make all things alike. Now, these things come from time to time to be a record of your association. If we have disadvantages, we have some advantages, for since the wrecking work of financial disturbances elsewhere, the disasters have affected Chicago very little. Today we seem to be entering upon a new era of building operations grander than ever before.

Alexander Kirkland was called for and responded substantially as follows:

Mr. President and Gentlemen: It affords me a hearty satisfaction to be present at the formation of this association, and to congratulate you upon the auspicious formal opening of your new quarters. It would seem to me that the gentlemen engaged in the business of building have at last decided to organize in an association that is calculated to promote their special interests. It is well, gentlemen, that you have done so. At the outset you may not perceive the actual benefits of such an association, but speaking from an experience of upwards of forty years of intimate acquaintance with building interests, I venture to predict that, if you follow up the rules of your association, you will do for yourselves far more good than you now anticipate. "In union there is strength," and if you will conscientiously unite to carry out to their legitimate issues, the purposes for which you organize, as set forth in your charter, a great good will be conferred, not only on yourselves, but also upon the clientage of owners which this wonderful city is continually thrusting upon you. And right here, gentlemen, I take the opportunity of saying that in every judicious effort you may put forth in the interests of building, you will have the coöperation of the city administration. The system now in operation governing the issue of permits for building, and the execution of the bonds required by law for the temporary use of a portion of the street upon which the building to be erected abuts, I know is unsatisfactory to the building fraternity. Since the creation of the Department of Building the system has not been changed. During the first year of the Department's existence there were issued four hundred and eighty permits of all kinds, yielding a revenue to the city of two hundred and forty dollars for the entire year. At that time the number of inspectors was thirteen, as against four during the administration of Mayor Harrison, until last summer, when four more were added. Forty-eight hundred permits were granted last year, and the number this year promises to be much larger than last year Under these circumstances I think it is high time that steps should be taken to simplify the manner of issuing permits of all kinds required by persons about to build. There is now, I believe, an ordinance before the city council, prepared by a committee of your body, relating more particularly to the execution of bonds, which I endorse as far as it goes, but it don't go far enough. I think I am perfectly safe in saying that his honor the Mayor, the City Council and myself, will be pleased to coöperate with a committee of your association in perfecting a system that will be satisfactory to and appreciated by you, and at the same time one that will not conflict with the city's interests. The time occupied under the present system in procuring the necessary permits, in my opinion, is entirely uncalled for, and may be easily obviated. I assure you, gentlemen, the Department of Building is actively alive. I thank you for your attention.

DeWitt C. Cregier, the city engineer, was then introduced, and said:

Mr. Chairman, Gentlemen of the Convention: I did not come here to have any pleasure at all. I came as one of the city fathers. I understood that a "keg of nails" would be opened, and came here to congratulate you upon the occupancy of these appropriate and beautiful quarters. I desire to congratulate you upon this association or organization as one of the great factors in the building up of the magnificent city in which we are all personally or otherwise interested; as has been said, this is the great forerunner. If you would see your good works, look around you; you can see them on the streets everywhere, and it may well be one of the claims for the formation of this organization. I did not come here, Mr. Chairman, to make a speech. If I had, I do not know that I could do it; nevertheless, a word, will be my congratulations to the gentlemen, many of whom I have the pleasure of knowing, and a good many of them I have the distinguished pleasure of looking after, and I am going to keep looking after them so long as I am hired for that purpose. So far as this company is concerned, I think there are many here more able to entertain you than myself, but I thank you for recognizing my presence here and wish I could do more toward entertaining this intelligent assembly.

Architect S. M. Randolph was called for and spoke as follows:

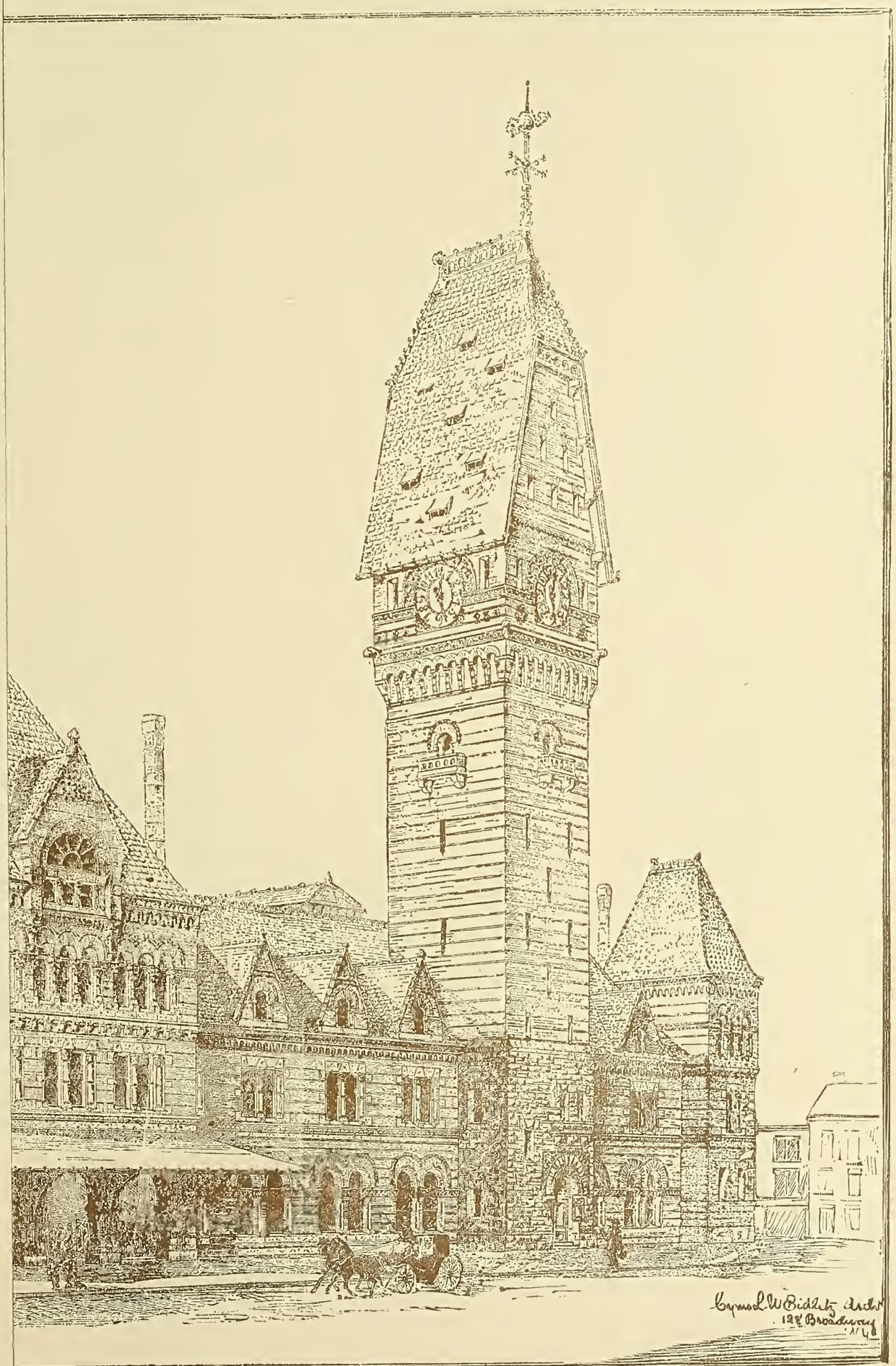
Mr. President and Gentlemen of the Exchange: I congratulate you upon the opening of this Exchange, because I do not believe that it is possible for these brother citizens and Republicans to get together without a benefit to themselves, and it is not possible for you to come together to plot against the whites. I believe this meeting will prove a grand benefit to Chicago. I have in my practice never failed to realize something from builders. I have learned from the hod-carriers, the mortar mixer and the bricklayer. The first principle of good building is honesty, and the question of who is going to be a successful architect or a good builder lies in the question, who is honest in his profession? Of course there is an exception to every rule, but the only true course is honesty. Years ago, when I was younger than now (I am not yet a veteran, nor yet one of the boys), but years ago I had the pleasure of meeting with Thomas Hugh Walters. I was out to his house in Philadelphia—to his "tent," as he called it. He was making a plan for a college. He looked on me as a boy, and took hold of me and said, "If you would be successful you must be honest." He said, if he had been a better man he would have been a better architect. Now, I hope this fraternity of builders will learn to speak well of a man wherever a man is deserving of good credit; do not be afraid to give it to him. If, on the other hand, his work should be condemned, condemn it. Now, gentlemen, I hope you will succeed and hope this will be a benefit to all. We are only in our infancy yet; we have got to learn. In fact there is more for us to find out than any of us know today. I thank you for your attention.

J. P. Ketcham, Vice-President of the Builders and Traders' Exchange, was called and spoke as follows:

Gentlemen: I am here very unexpectedly. I thought I would be deprived this privilege, and therefore am not prepared with a speech. I am very glad to be here, however, and glad to see the Exchange take possession of this room under such auspicious circumstances. I suppose I am here as much a representative of the lumbermen as anything else. I was going to say that I propose to help the lumbermen's interest in coming here today. I can assure you we are in sympathy with this organization, and we see the need of one. The wonder is, it was not organized years ago. And we have demonstrated the necessity of organization among our own fraternity, and have seen the good results of it, and think there is nothing tending more toward our own advantage than union and harmony in our own trade, through our organization. We have felt since that organization, two or three years ago, we have become better acquainted, more harmony in the trade, and think as the result we make more money out of it. I think a very good result ought to follow from this organization. Just a word or two more. There was probably, a few years ago, fifty lumbermen who said they had no use for city trade. There was so many contractors unreliable; and if we could be made to feel that any of these contractors are perfectly reliable, and the fact that they are members is a certificate that they are reliable, will tend to make us feel that the builders who belong to the Exchange are fully worthy of credit. It is not a question that a man should be possessed of wealth, but that he is honest. A man of good character and honest dealing, and that he belongs to this organization, should be a certificate of that fact. I am glad to be here today, and will pledge the lumbermen to do what they can for its success.

Mr. D. V. Purington said:

Mr. President: I supposed that I would be the last to be called upon. My being called upon I thought will be a signal to depart, and if you will delay departing, I will promise to let you off easy. There are many men in this assembly who have been engaged in business much longer than I have. For sixteen years all the energy and all the time has been spent together to its interest. It is therefore, Mr Chairman, peculiarly satisfactory, and I congratulate the gentlemen and those connected with the building work. The common interest draws them together, where we can arrange matters of business of building, and arrange for their benefit and encouragement. This is, I hope, Mr. Chairman, a forerunner for all and every one to success in building. It remains to be seen whether or not we can maintain an institution of this kind in Chicago. Sometimes I have doubts of

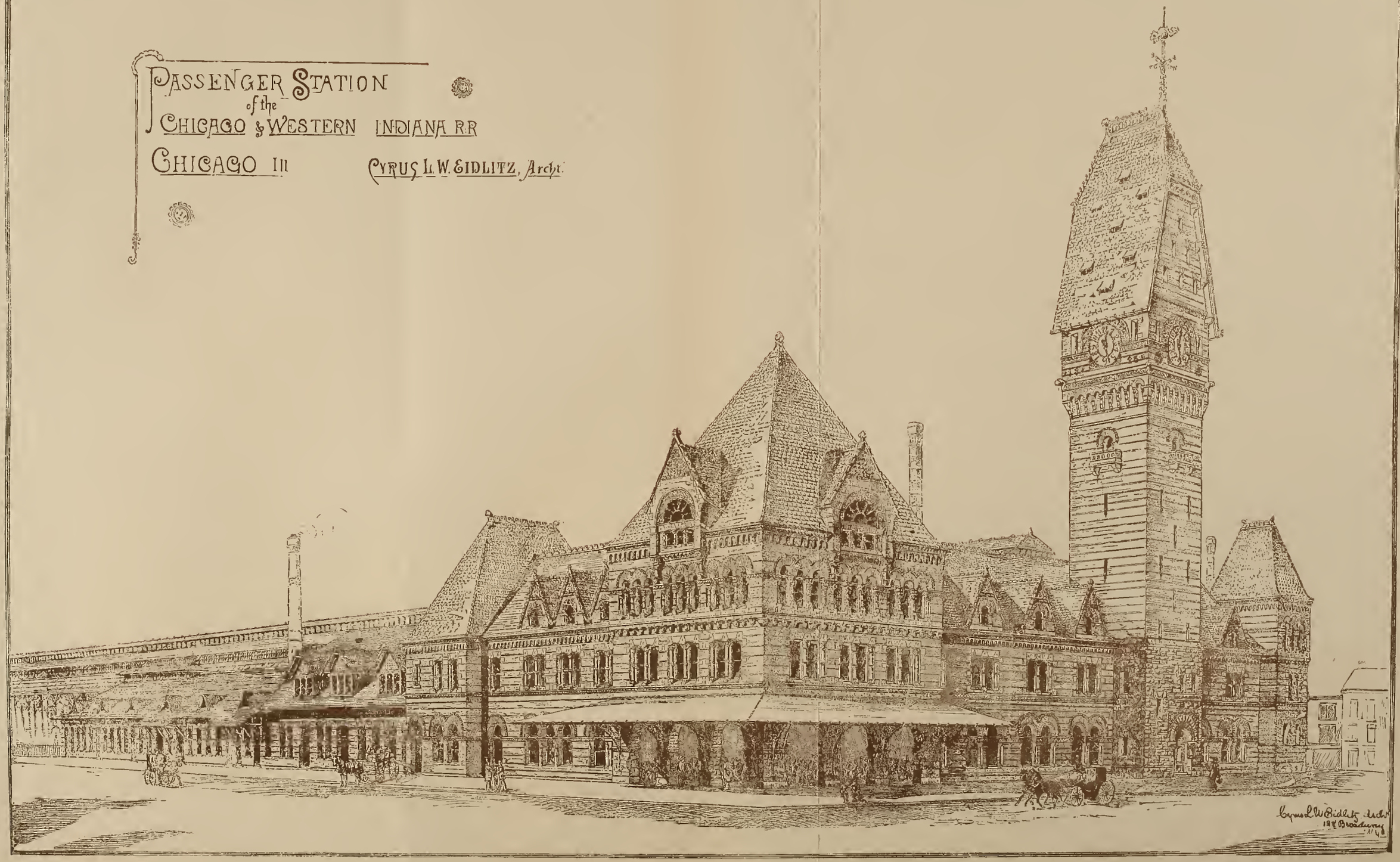


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CHICAGO Ill

CYRUS L. W. EIDLITZ, Archt.



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it accomplishing any good, but I certainly hope, and it has my best wishes, and all my efforts will be so directed, that it will not be a failure. I have listened to the remarks made here, and am sorry, on account of the Mayor, that he did not stay longer. I know that the Mayor and I do not agree in politics; we have never agreed, however, and it is quite evident we never shall. The Mayor gave you a little of his experience in building in Chicago. He told you the lumber was poor, the carpenter work poor, the painting blistered, the plastering fell to pieces. I do not know that the last carpenter work he had lasted better, I do not know that he let the plastering to some mean man who did it poorly; I do not know this,—but I do know that he bought his brick because they were cheap. [Applause and laughter.] I know he did get them for $6 a thousand less than anyone else would sell them. [Applause and laughter.] There is no reason why this Exchange should not succeed. We have peculiar advantages over every other city in the world. We have all the lime and the sand that are necessary for building, and out on the canal is an accessible quarry, where large quantities of stone are found for building. Then near here is the cement necessary to lay the stone. What other city has those advantages we possess, and contractors who will use these advantages? There is no question about it. Twenty years ago there was no such thing as architectural beauty. Now the owners of property and buildings in this city endeavor to build such blocks that they will blend into beauty. It is no boast to say that by the year 1900 we shall have the most beautiful and the best built city on the American continent, to say the least. I understand by this association that it will be a benefit and encouragement. And whatever may be of advantage to one may prove of advantage to the whole. And I also understand, Mr. Chairman, that one object of this association is, to put ballots into the box of one, and I want you to understand that I heartily accord with you.

Geo. W. Tapper spoke as follows:

Gentlemen: I am not going to make a speech here like Chicago's best mayor, whom you have already heard, but as builders I want to impress upon you the importance of making this Exchange a success. You must come here every day between eleven and twelve, and not be discouraged if you cannot find those here you wish to. Keep it up and persevere. All the business connected with the building interests should be transacted in this room. Will you do it? That is the question. If you will, come here every day from eleven to twelve and it will be done. I want to put this to a vote. All willing to come here every day between eleven and twelve, say "aye." The vote was unanimous.

In conclusion, the President urged the members to make all business appointments from 11 A.M. to 12, during the Exchange hour. By regular attendance all would soon be aware of the advantages afforded by the Builders' Exchange. Thereupon he declared the Builders and Traders' Exchange of Chicago opened for business in due form, and bade them all to govern themselves accordingly.

Lumber Notes.

THE South is making special efforts to develop its lumber industry.

THE annual sales of sawed lumber in the United States are said to aggregate $233,000,000.

THE receipts of lumber in Minneapolis for the week ending July 1, were 1,570,000 feet. The shipments were 3,520,000 feet.

WITHIN three years the number of sawmills in Arkansas has increased from three hundred and forty-nine to over twelve hundred.

A STICK of timber cut by N. J. Stallworth, Bell's Landing, Alabama, measured 72 feet long and 36 inches square at the ends. It contains 657 cubic feet and it has been estimated to be worth $500.

THE Panama ship canal will use 550,000,000 feet of timber and lumber, such as can only be obtained from Puget sound and British Columbia. The Tacoma Mill Company have secured a contract for 125,000,000 feet of the amount required.

CANADA'S logging and lumber business is said to give employment to 100,000 men. Most of them have families, and it is accordingly estimated that half a million persons—one-ninth of the whole population of the Dominion—are dependent upon these industries for their support. Of the total capital, $165,000,000 is in sawmills. Besides this, some $50,000,000 is invested in lumber outfits.

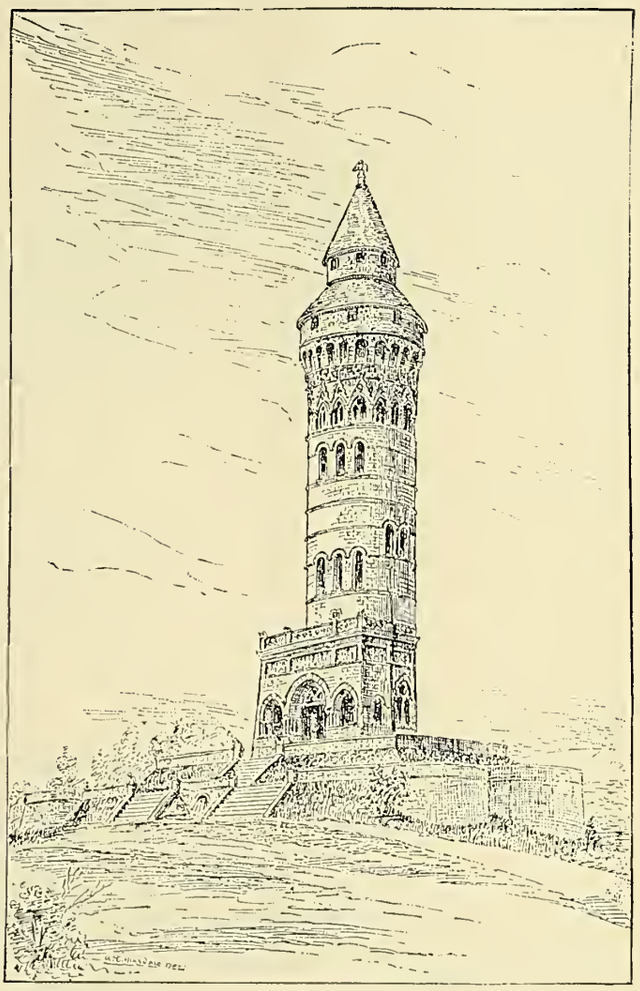
LUMBER has been absorbed in the Chicago market much more rapidly than one year ago, as is shown in the June report of the secretary of the Lumber Exchange, from which it appears that with receipts 100,867,000 feet of lumber in excess of the same date last year, stocks on hand are but 50,391,154 feet increase over June, 1883. Sales and shipments being thereby shown to aggregate a larger trade than in 1883 by about eight per cent.

THE following is given as the weight of hardwoods per foot, board measure. Some allowance must be made in the weight of fresh cut, as the same wood differs some in weight when green in different localities:

Name of wood	Green. lbs. to 1 ft.	Dry. lbs. to 1 ft.
Ash	4½	3½
Apple	5	4
Beech	5	4½
Birch	4½	3½
Basswood	3½	2½
Chestnut	4	3
Cherry	4½	31-5
Cypress	4	3
Cedar	4	3
Elm	4	3

Name of wood	Green. lbs. to 1 ft.	Dry. lbs. to 1 ft.
Hickory	5	4½
Holly	5½	4½
Lignumvitæ	9	8⅘
Maple	5	4½
Mahogany	5¼	4½
Oak	5	4¼
Poplar	3¼	2¼
Rosewood	8	6¾
Walnut	4½	3½

—*Miss. Valley Lumberman.*



The Garfield Monument.

ON the 26th ult. the board of trustees of the Garfield Monument Association met at the art gallery of Mr. J. F. Ryder, in Cleveland, Ohio, to select from various models a monument to the memory of the late President Garfield. Mr. Calvert Vaux, of New York, and Mr. Henry Van Brunt, of Boston, well known sculptors, upon invitation of the committee of the Association, had, without any knowledge of the architects of the respective models or of each others' conclusions, reported to the committee, which then awarded the first prize of $1,000 to the model designed by architect Geo. H. Keller, of Hartford, Conn. The second prize of $750 was awarded to architects C. F. and J. A. Schweinfurth; and the third prize, $500, was accorded to architects Moffett and Doyle, of New York.

The monument will be erected in Lake View Cemetery, and consists of a large tower rising from broad terraces, which are reached by wide spreading steps, forming a dignified approach to the monument. A projecting porch at the base of the tower contains a vestibule, on one side of which is placed the keeper's office, and on the other a room for a visitors' register and for the reception of interesting relics.

The vestibule leads into a round, vaulted chamber, the stone dome-like roof of which is carried on eight massive, polished granite columns, arranged in a circle around the sculptured tomb, which occupies the center of the chamber. The capitals of the columns and the molded arches between are richly carved, the pavement is tiled in harmonious colors and designs, and the whole is lighted by richly mullioned windows, which throw a softened light on the tomb. An aisle outside of the columns surrounds the chamber, a side wall of which is decorated with niches for the reception of statues or vases of flowers, and window seats are formed between the jams of the mullioned windows. A spiral staircase of stone leads from this ambulatory to the top of the tower, so constructed that in ascending the tower it winds around the tomb below. In making one revolution of the tower there are four flights of stairs, and a landing is provided at the foot of each flight, lighted by triple windows, from which a view of the landscape can be had. At the top the spiral staircase opens on a gallery from which the surrounding country can be viewed. On the outside of the monument, above the deeply recessed portal, is a band or frieze of sculpture six feet in height, extending entirely around the base of the tower and within easy view from the ground. It is divided into panels containing bas-reliefs, which represent in a graphic manner the career of Garfield as an educator, a soldier and a statesman; the long and anxious waiting and watching of the world over his deathbed, and the remarkable funeral procession from Elberon to Cleveland. The remains of the deceased President are inclosed in a crypt built below the level of the chamber and immediately under the carved tomb. Vaults for his family are provided back of the chamber, occupying the space between two of the bays. The chamber containing the tomb should be executed of the richest materials for the most artistic architectural effect, and the statue of Garfield either of bronze or marble.

The Central Architectural Society.

SOME NOTES REGARDING SUCH A SOCIETY SUBMITTED BY THE ASSOCIATION AT DES MOINES.

THE "*Institute*" *System* is a failure. Witness the present demoralized state of the British Institute itself and the efforts of the "American" one to patch and repair its organization. *An Institute* is properly the *honor-corps* of a nation, containing the highest men of many corps. It forms the *great cap-stone of the pyramid. Until Architecture in America* is sufficiently advanced, and an organized corps of workers need a capping-stone, an "Institute" must be laid aside as "*the stone the builders reject.*"

We cannot build enduring pyramids balanced on one point. Egypt teaches us better than that. We want this time to build a broad and good foundation, and to root it well into the soil.

The Foundation Association to bed well must be *concrete* (agglomeré) *architecture* rather than professional trade-unions resembling, in many respects, the "*societies for the propagation of architecture,*" in the low countries.

Upon such a foundation a pyramid will be built that cannot fail to stand.

Without any delay over a preliminary convention of architects, let associations begin to form at once.

These are *local*, rooting into every crevice of the soil. Wherever *two architects* will work together in the building of this pyramid and turn their backs on the chawing of each other, so in vogue, call them to action.

Let their names be known. They can communicate with each other. At once the foundation will begin to interlock.

This winter a convention can be called, that will bring the pyramid above ground and provide for the necessary "batter."

By the next annual meet we will have a solid construction high enough to form a good foundation for an "Institute of Architects."

Let this *uncapped pyramid*, starting where it belongs, in the great valley of the Mississippi, be called the CENTRAL ARCHITECTURAL SOCIETY OF NORTH AMERICA, made up, not of individual members, but of *local associations*.

Let these be formed as rapidly as possible and report their organization and membership to the editor of THE INLAND ARCHITECT.

The Architectural Association of Des Moines, Ia., hereby reports its organization, as follows:

CENTRAL ARCHITECTURAL SOCIETY OF NORTH AMERICA — DES MOINES ASSOCIATION.

Members.—J. S. Blake, president; E. H. Taylor, secretary; W. F. Hackney, C. H. Lee, W. L. Plack, Charles Terrell, Benj. J. Bartlett, active members; F. D. Hyde, Fred Heer, non-resident members, Dubuque, Iowa; Charles A. Smith, George W. Fehleisen, associate members (draughtsmen).

The Des Moines Association, from its own experience, further suggests: First — Delays only will occur without any contra-gain, while *willing architects* wait for the *united action of all* locally interested. Second — The *hinderers* in the profession can at any time be left behind by a new local organization numbered the second or third, if necessary. These are two points found absolutely necessary while the ground is being broken for the foundation.

Respectfully submitted to the editor of THE INLAND ARCHITECT by order of the association at Des Moines, Ia., June 26, 1884.

E. H. TAYLOR, Sec'y.

Architectural and Building Notes.

MR. J. B. PARKE, of the Paris Ironworks, Buffalo, was in the city on the 1st inst., in the interest of his company.

ONE of the most striking designs for an elevator car has been made by architect Sullivan for the Crane Bros. Manufacturing Company. It is for the elevator of the Manhattan Bank, of New York city. The work will be executed entirely in bronze, including the platform and hangers. Some of the panels are very unique in design, while others are plain, the object being to make the car rich, light and artistic.

THE new rooms of the Chicago Builders and Traders' Exchange in the Republic Life building are finished, and are entirely creditable to the organization. They consist of a main hall, 38 by 55 feet, two rooms opening from it, one to be used as the library of the association, and the other by the secretary and other officers. The Exchange contains five or six other offices, which join the main room. The floor is of handsome hard maple, oil finished, and was furnished by the Wm. E. Frost Manufacturing Company. It is neatly furnished by a large number of fine cherry cane-seated chairs, and several large green-baize covered writing-tables, supplied with stationery, etc., for the convenience of members.

THE Wight Fireproofing Company has received contracts for the complete fireproofing of the Gaff Office Building; the fireproofing, scagliola work and plastering throughout of the Northwestern Safe and Trust Company's building; and are completing the fireproofing of roof and elevator shaft of the Revere House, Chicago. This company has also been awarded the contracts for the complete fireproofing of the new Government buildings at Toledo, Ohio; Quincy and Peoria, Illinois, and extension to the building at Buffalo, N. Y.; and for extensive fireproof work in the new Patent Office at Washington, D. C., consisting of protection for columns, girders, etc. The complete fireproofing of the new *Tribune* building at Minneapolis is being commenced by this company.

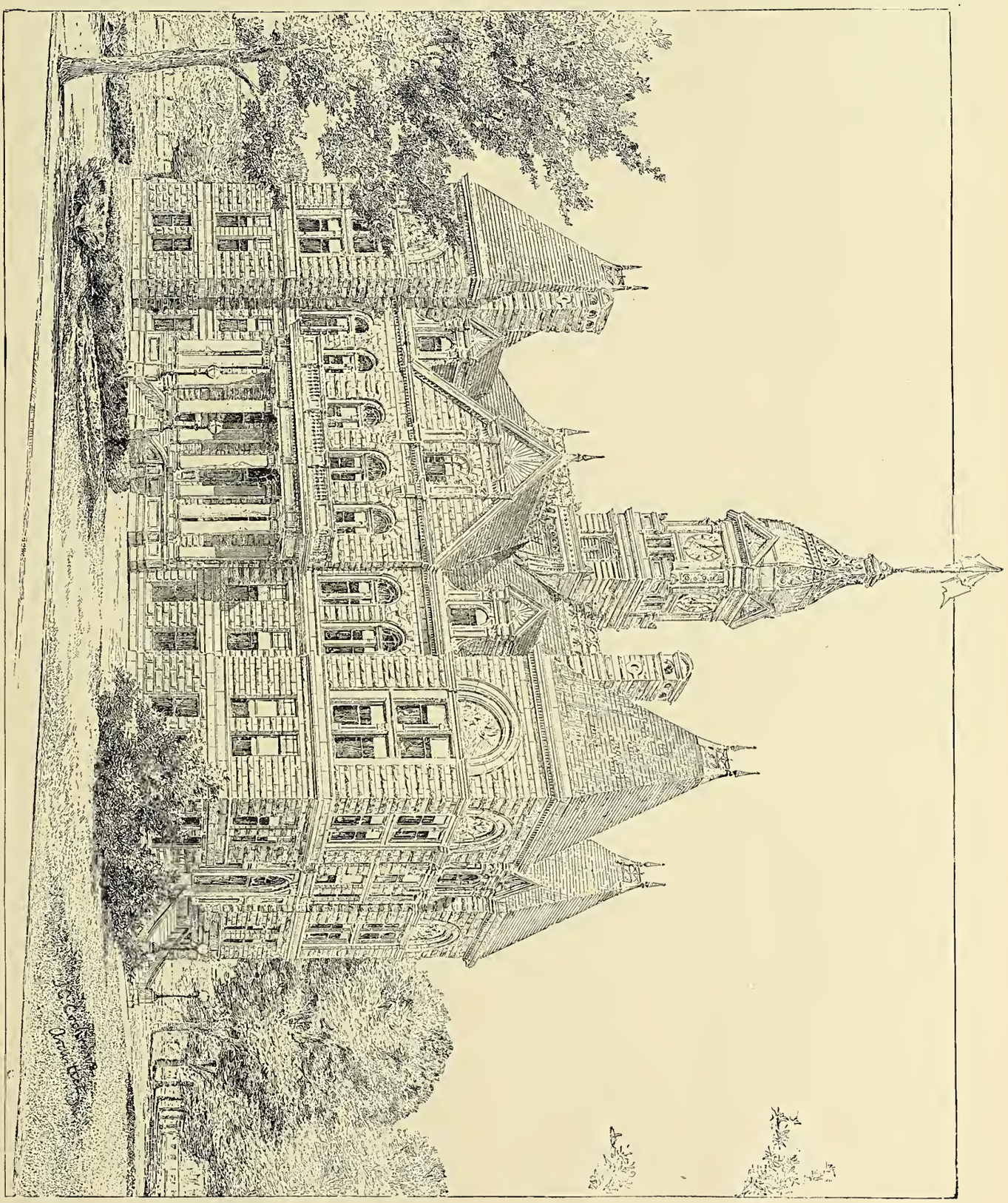
THE *Chicago Tribune*, in speaking of Chicago architecture, recently said: "Not long ago a New York architect, who is an acknowledged authority among his kind, visited Chicago and unhesitatingly pronounced a number of residences, as well as office and business blocks in Chicago, the finest specimens of architectural skill in this or any other country. The gentleman referred to is Mr. Eidlitz, of Broadway, New York, well known all over America. One residence on the North Side that is not yet completed Mr. Eidlitz pronounced the finest in exterior lines that he had ever seen. The architects of this and other houses that Mr. Eidlitz praised, belong to Chicago, and are possessed of what is commonly known as the Chicago idea in architecture—a combination of all that is good of the past and the present and much that is original. It is also true that Mr. Eidlitz is not the only good judge who is willing to give Chicago architects their due.

Our Illustrations.

Page 79. Chestnut street Baptist Church, Louisville, Ky., by Architect H. Wolters. The building is 60 by 85 feet between walls inside, 30 feet high on walls, with clear story 40 feet above floor and 72 feet to point of gable. The ceiling is divided into three parts; one center arch, 40 feet wide, and two quarter-circles, 10 feet radius, springing from walls. The front has one square tower, 17 feet each side, 80 feet to top of masonry and 152 feet high to point of finial; one octagonal and partly round tower, 15 feet from out to out, 53 feet high to top of masonry, and 84 feet to point of finial. The towers form the vestibules, and are connected by a cloisture forming three entrances to the auditorium. The style of the design is Gothic, and was originally intended to be carried out in stone masonry, but is now being constructed of Zanesville pressed brick, with cut stone and terra-cotta trimmings. The cost of the structure is $55,000.

Page 83. Will County Courthouse, Joliet, Ill., by J. C. Cochrane, architect, Chicago. The building of which we show a perspective, drawn by Paul C. Lautrup, is the consummation of the efforts of the commissioners of Will county, Illinois, to secure a courthouse, architectural in exterior, well planned and honest in construction, and who, to attain this end, made the innovation upon the general practice in such cases which called for editorial mention in this journal some months ago; and as the result of their honest and businesslike procedure, these commissioners are securing all that they hoped for. The exterior will be built of Joliet marble, and is free from all unnecessary carvings, which only add to expense, and are often not only devoid of ornament, but detract from the exterior appearance. The interior is well planned, and the construction will be iron joists and girders, with fireproof hollow-tile arches between. This will make vaults unnecessary, as each room will be a fireproof vault in itself. The building is 76 by 148 feet, and will cost about $140,000. The corner-stone was laid on July 4, with imposing Masonic ceremonies, and the building promises to be one of the most creditable of the many constructed from the plans of its architect.

Supplement. Depot for the Western Indiana Railway Company, at Chicago. Cyrus L. W. Eidlitz, architect, New York; J. T. Alton, superintendent, Chicago. The structure fronts 213 feet on Polk street, with a building 40 feet wide and 446 feet long on Third avenue, and one 200 feet long on Fourth avenue. The height of the wings on Third and Fourth avenues is 40 feet from the street level. Between these wings, and continuing a distance of 600 feet south, will be a train-shed, which will be 135 feet across between the buildings and widening to 165 feet beyond these, and will be 60 feet to the ridge ,and join with that of the main building. The main building on Polk street will be three and one-half stories on the corners, with two and one-half stories between. Between the center of the front and the Fourth avenue side will be a tower 195 feet in height. The main building will have a half-story course of brown sandstone, except the main entrance under the tower and lobby, which will occupy the Third avenue corner, and these will be of this stone to the second story. The remainder of the walls will be of Philadelphia pressed brick, with courses of molded brick and elaborate cornices, spandrels and other ornamentations of terra cotta. All the stonework about the main building will be elaborately carved, and like the terra cotta will represent some possibilities in carved work never before shown in Chicago buildings, all being from original designs by the architect. The entire roofs will be of slate. That upon the main building will be of red slate with green diamonds, and the remainder of green slate. The first floor of the main building, will be one grand waiting-room. The corner on Third avenue will be a special feature, as the main entrance and lobby will be located there. This will be finished entirely in enameled brick and terra cotta, the floor of tile and the ceiling of hardwood. The entire floor is finished in this manner, the enameled brick of varied colors in the walls forming a bright and pleasing interior, the elaborate cornice of red terra cotta contrasting admirably with it. The tower entrance is similar in finish to that of the lobby, but less elaborate. The second floor will be devoted to the general offices of the railway company, and will be finished in hardwood with parquetry floors. The 10-foot basement below the main building will contain the closets, barbershop, kitchen for the restaurant, storage, etc. The wing on Third avenue will be divided into a dining-room 80 feet long, and the remainder will contain a baggage-room. That on Fourth avenue will have a ladies' waiting-room, opening from the lobby, and the remainder of the wing will contain baggage and express rooms, with emigrant quarters beneath in the well arranged 10-foot basement. These buildings will represent the finest depot, as well as one of the best built structures yet erected in the West. The foundations were laid and the walls raised by one of our most reliable masons, and the engineering skill of the superintendent is noticeable in the success attending its erection. The architect, being in New York, has placed extraordinary responsibility upon the superintendent, and much of their success will be due to his intelligent interpretation. Five roads terminate in the Western Indiana railway at Chicago, the Chicago & Grand Trunk and the Grand Trunk Railway of Canada, which is the most powerful of all the Eastern roads, as well as the longest — its direct line extending to Portland, Maine. The Chicago & Atlantic, though a new road, is one of the best equipped. The Louisville, New Albany & Chicago, the Chicago & Eastern Illinois, and the Wabash, St. Louis & Pacific, all good roads and worthy of this magnificent termini. Ten tracks enter the magnificent train-shed, and all these, as well as the buildings, will be lit by electricity. The depot will be ready for occupancy in the fall, and finished at an estimated cost of $500,000.



WILL COUNTY COURTHOUSE, JOLIET, ILL.—J. C. Cochrane, Architect, Chicago.

Mosaics.

THE Boston *Watchman* says that within the last nine years nearly eight hundred churches have been burned in America, mostly through defective heating apparatus.

JAS. H. BEGGS & Co., terra-cotta and ornamental brick works, Wilmington, Del., send out some beautiful illustrations of their work, which merit attention from architects and builders. Their works have an annual capacity of 15,000,000 building brick annually, and their ornamental brick and designs in terra cotta, both in beauty of design and excellence of color of their brick, compares favorably with any made.

USERS of hardwood lumber will be glad to know of the establishment of a new yard for wholesale and retail trade by J. S. Leonard at North Water and Market streets. Mr. Leonard has had a long and valuable experience in the handling of domestic hardwoods, both at Syracuse, N. Y., and in the lumber regions of Florida, and his large covered yard just established is certainly stocked with an exceptionally fine grade of lumber, his own careful and intelligent inspection being especially noticeable in the quality of the stock.

THE Chicago Murano Glass Company is the name of a company recently organized for the purpose of making a new and beautiful decorative glass. The process has excited much comment in the East, resembling as it does the glass of Murano, and the lost art of glass-making, relics of which have been found in Egyptian and Persian tombs, as well as in the more recent work of Venetians. Those interested promise much for the future, and if the work turns out as beautiful as the samples shown, a new decorative material of the first order will soon be placed before our architects.

AMONG the various summer resorts made accessible by the building of the Northern Pacific railroad, few will be found more delightful than Detroit, about 200 miles from St. Paul, Minn. Visitors will find first-class accommodations at the Hotel Minnesota, which is a new four-story building, provided with all modern conveniences and ample means of escape in case of fire. The village is near Detroit lake, a body of water as clear as crystal and abounding with fish. There are many other lakes in the vicinity, and all kinds of edible water-fowl are plentiful, affording abundance of sport for the sons of Nimrod.

As a matter of some interest to architects and draughtsmen, we may mention the fact that Keuffel & Esser's "lightning black process," for copying drawings and tracings, is fast superseding all other methods now in use. The principal advantage offered by this process consists of making copies or duplicates direct from the original, thus saving the labor to make tracings and avoiding all errors often occurring in the tedious work of tracing. Wherever this process has been tried the results have been of an entirely satisfactory character. Keuffel & Esser, 127 Fulton and 42 Ann streets, New York, will promptly respond to all inquiries.

J. W. REEDY'S elevator manufactory was seriously damaged by fire on the 30 ult., but no delay was experienced in filling orders, as the machinery was running within two days after the mishap. The greatest damage was experienced in the shop, a two-story building adjoining the four-story brick factory building, the latter being damaged by water to some extent. As the loss was fully covered by insurance, J. W. Reedy is to be congratulated that what promised to be a very extensive fire was timely prevented by the fire department. The firm announce that no change will be necessary in taking orders or in the arrangement of their business.

A DEVICE for cleansing and flushing sewers and house-drains by a system of water-jets distributed through the entire length of sewer or drain, thus keeping the same free from offensive matter and gas, is in practical operation for the first time since the system was patented, at Nos. 161 to 167 South Canal street, opposite union depot, which claims to be an innovation upon the old order of sewerage. Among the scientific men who are said to have examined and indorsed the system are Gen. W. S. Rosecrans, Capt. James B. Eads, Drs. Smith Townsend and J. B. Hamilton, of Washington; Oscar De Wolf, commissioner of health, Chicago, and architect E. A. Hatherton, of San Francisco.

AN illustrated catalogue issued by the Zanesville Pressed Red Brick Company, W. B. Harris & Bros., of Zanesville, Ohio, proprietors, shows comprehensively the facilities of this firm for producing all forms of pressed brick, especially of moulded brick, 110 cuts being introduced to show the variety of forms this firm keep in stock, aside from those made for special orders from special designs. Numerous buildings in Ohio, Illinois, Iowa and Wisconsin, in which these brick are used, are also illustrated. The brick made by Harris Bros. is already well known to architects, and not a few speak highly of its color and quality. Abbott & Taggart, 161 La Salle street, are the firm's agents in Chicago.

A DESCRIPTIVE pamphlet and price list has been received of the Shumard Sash Balance Company, of Richmond, Indiana. The Shumard balance is a neat device, the merits of which are set forth in the pamphlet substantially as follows: It does away with the use of box frames, weights and ropes; is simple in construction, easily attached and adjusted to sash of any weight or size; is very durable, noiseless in operation, and the sash when balanced remains exactly where placed, requiring very slight pressure to move it up or down; each sash acts independently, and sash can be removed by taking it off the hooks. In addition to all of these advantages, the manufacturers triumphantly claim an article that is not only far superior, but cheaper, than anything else of the kind in use.

THE fireproofing of buildings, which has drawn the attention of the entire building fraternity toward the best means of rendering buildings less combustible, has brought before those interested a method that has been used with success for the past ten years, but until of late without special prominence. This is the James John concrete method. It consists of an ingenious method of fastening concreting to the wooden joists or studding of ceiling or walls, over which the usual plaster coat is laid. The material is secured by galvanized wire, and many tests have shown that its fire-resisting properties are excellent. One notable instance was observed some time since, where a varnish manufactory, the ceiling of which was made of this material, caught fire, and the ceiling remained intact, though the heat was sufficient to break the stone window caps and ruin the iron doors. The most important building now being treated by this method is the Continental office buildings, of which Geo. H. Edbrooke is architect. This building has wooden joists, and these will be covered as well as the walls with this material, at a cost of about $10,000. The method is cheap, and as a method of fireproofing is worthy of the consideration of architects and owners everywhere.

THE laundry department of every well regulated household is, or at least ought to be, a special feature in itself. In others, no modern built house of any pretensions ought to be constructed, in the city at least, without special arrangements being made for a laundry department. In this special line we can refer our readers to B. R. Hawley, superintendent and manager, room 11, Grannis Block, Chicago, of whom they can obtain all the information they desire in reference to laundry heaters and air radiators, laundry dryers and conveyors, and kitchen dryers and conveyors, which are so necessary and almost indispensable in the domestic household. Hawley's laundry devices are to be found in almost numberless households in this city, in the best class of residences, as well as in hotels, etc., where they have always given the very best satisfaction.

WE have received from Messrs. Bakewell & Mullins, manufacturers of galvanized iron cornices and all kinds of architectural sheet-metal work, of Salem, Ohio, an illustrated catalogue, which is deserving of something more than a mere mention, because it is something more than a mere catalogue. It is a book of nearly one hundred pages, and, in addition to an immense list of beautifully illustrated door caps, window caps and sills, cornices, crestings, chimney caps, finials, capitals, and architectural ornaments of various kinds (all of which illustrate, in proportion and design, the highest perfection of mechanical skill and taste), the book contains a chapter on "Some of the Terms in Common Use among Builders and Cornice-Workers"; another on "How to Order Sheet-Metal Cornices, etc."; on "Methods of Putting Up Sheet-Metal Cornices"; on "Construction Drawings"; and other subjects. Much of the instruction in these several chapters is finely illustrated by line engravings and diagrams, and all tend to render the book a valuable acquisition to the office of any architect or builder, and will no doubt be gratefully received by all who are at all interested in putting up such work. The manufactory of Bakewell & Mullins is one of the largest of the kind in the world, with an equipment of steam power and machinery for turning out all kinds of sheet-metal work in the shortest possible time and in a superior manner. The works give employment to about ninety hands, and the orders come from all sections of the United States. This firm have the contract for the ornamental zinc work for the Exposition building at New Orleans, which will comprise a colossal group representing "America" for the grand entrance. There will also be heroic statues of Washington, Columbus, Justice and Commerce, and the coats of arms of all the states of the Union. They have just completed a mammoth figure of the late President Garfield, attired as a Knight Templar, which is to surmount the new masonic temple at Sioux Falls, Dakota. A contract just finished for the conservatory of John W. Garrett, of the B. & O. railroad, at Baltimore, embraces $1,700 worth of burnished brass; and statuary has been completed or under way for several very costly courthouses.

Inventive Genius in Building.

299,504. Portable Derrick. Harrie Austin and Ives Scoville, Oakland, Cal.
299,546. Electric Fire-Alarm. Geo. E. Hovenden and Edwin R. Hovenden, Grand Rapids, Mich.
299,571. Manufacture of Enameled Brick. Chas. Newton, Council Bluffs, Iowa.
299,598. Mode of Constructing Frame Houses Edsell Totman, Hinsdale, Ill.
299,669. Automatic Ball Safety-Faucet. Harry C. Montgomery, Cleveland, O.
299,742. Door-Securer, etc. Edward P. Conner, Santa Rosa, Cal.
299,811. Track for Barn-Door Hangers. John H. Lawrence, Sterling, Ill.
299,820. Fireproof Ceiling. Henry Maurer, New York, N. Y.
299,826. School Desk and Seat. Charles A. Merrill, Grand Rapids, Mich.
299,842. Roofing-Slate Fastening. Bernard M. O'Neill, St. Louis, Mo.
299,881. Furnace. John A. Topliff, Edward S. Cross, Wm. S. Cox and John A. McCollum, Elyria, Ohio.
299,888. Water-Closet Valve. Peter White, St. Louis, Mo.
299,924. Skating-Rink Floor. George Cole Harkins, Salt Lake City, Utah.
299,925. Auxiliary Overflow for Lavatories. Patrick Harvey, Chicago, Ill.
299,927. Plane. Samuel E. Hilles, Cincinnati, O.
299,930. Hydraulic Elevator. George Q. McGown, Golden City, Mo.
299,944. Window-Sash. Lewis L. Arnold, Chicago, Ill.
299,962. Wrench. John Combs, Rushville, O.
299,965. Smoke Consuming Furnace. Alexander Crawford, Duluth, Minn.
299,993. Ruler. John E. Mann, Cleveland, O.
300,005. Joint for Lead Pipes. Wm. R. Patterson, Chicago, Ill.
300,054. Brick Kiln. Wm. H. De Valin, San Rafael, Cal.
300,075. Heating and Ventilating Device for Buildings. Amanda M. Hicks, Clinton, and Alonzo Dishman, Paducah, Ky.
300,079. Chimney Cowl. J. Worth Jackman, Herbert B. Neighbor, John R. Stick and Samuel F. Hablitzel, Lafayette, Ia.
300,105. Window. John Bartlett Montagne, James Thomas Booker and Enoch Cass Dinning, Franklin, Ky.
300,119. Lumber Elevator. John Paul, La Crosse, Wis.
300,136. Window. Nils F. Sandelin, Chicago, Ill.
300,146. Screw-Driver and Holder. John Sinnott, Chicago, Ill.
300,169. Door-Check. Otis Palmer Vandeburgh, Toledo, O.
300,178. Carpenter's Work-Bench. Clarence Adelbert Williams, Webster City, Ia.
300,190. Fire-Extinguishing Compound. N. Gray Bartlett, Chicago, Ill.
300,266. Cabinet-Shave. John A. Keiser, Cincinnati, O.
300,334. Electric Door-Lock. Conrad Wuest, Zurich, Switzerland.
300,343. Protecting Piles. Jacob A. Camp, Sandusky, O.
300,387. Key-Fastener. Robert T. Miller, Covington, Ky.
300,541. Safety-Catch for Elevators. Frank Arthur Weeks, Enniskillen, Ontario, Can.
300,556. Brick-Machine. Henry C. Barker, Sedalia, Mo.
300,581. Fireproof Building. William H. Dolman, Brunswick, Mo.
300,607. Annunciator. Robert Josephus Hewett, St. Louis, Mo.
300,654. Area-Window Protector. Joseph F. Smith, Pittsburgh, Pa.
300,663. Chimney Cap. David Clinton Trester, Anamosa, Iowa.
300,677. Elevator-Gate Attachment. Isaac K. Beekman, Dubuque, Iowa.
300,694. Sash-Fastener. Osborne R. Cook, Salem, O.
300,717. Wrench. Frank Waldo Merrick, Sandusky, O.
300,725. Veneer Press. Augustus Newell, Chicago, Ill.
300,729. Fire and Waterproof Compound. Oscar F. Parsons, Eureka, Iowa.

New Publications.

COTTAGES; OR, HINTS ON ECONOMICAL BUILDING. Containing twenty-four plates of medium and low cost houses, contributed by different New York architects, together with descriptive letterpress giving practical suggestions for Cottage Building, compiled and edited by A. W. BRUNNER, architect; to which is added a chapter on the Water Supply, Drainage, Sewerage, Heating and Ventilation, and other Sanitary Questions relating to Country Houses, by WM. PAUL GERHARD, C.E. Price $1. Sent by mail, free of postage, to any part of the world. WM. T. COMSTOCK, publisher, No. 6 Astor Place, New York.

To the person of moderate means who is about to realize his long cherished hopes of building a home for himself, "Cottages" will be found of especial interest and value. The designs represent houses to cost from $500 to $3,500. They are by well known architects, who have planned with much skill, aiming to show picturesque, well arranged cottages at the minimum of cost. The practical "hints" by architect Brunner, as well as the pleasing designs contributed by him, show a large appreciation of the requirements of cottage building, and the ability to meet them. The chapters on cottage sanitation by the well known author Wm. Paul Gerhard, C.E., treat in a simple and direct way with this vital but too often neglected part of cottage building. His recommendations should be read by all who have to do with suburban architecture. The influence for good upon the architecture of the country of such books as this, with their advanced ideas in design and precept, can scarcely be overestimated.

"STRUCTURAL DECORATION" is the title of a handsome little manual sent out by the H. W. Johns Manufacturing Co., of New York; setting forth the merits of the H. W. Johns asbestos liquid paints in particular, and the subject of house decoration in general. The virtues of asbestos are now well known to the public, and the colors manufactured by the above named company have attained such a wide popularity that their commendation might well be deemed superfluous. In the book before us are views of many of the largest and finest buildings in the country, whose beauty has been enhanced by the use of these colors, while the fire-resisting quality of the paint gives them a most valuable protection. They are especially commended for durability, and for richness and permanency of color. The company manufactures forty-eight shades of body and trimming colors, and also make standard and light greens, light and dark blues, reds, black, etc., samples of which they will furnish on application. Address H. W. Johns Manufacturing Co., 87 Maiden Lane, New York.

The American Furniture Gazette for July is just as rich in illustrations and literary merit as any of its previous numbers. It is one of the model trade journals of Uncle Sam's dominions. The furniture dealers are to be congratulated upon having such a rich collation prepared for them every month. The art criticisms, gossip, trade notes, and personal memoranda, by editors and contributors, combine the humorous and practical in such equal proportions that one is led to think the furniture men as a class are as jolly as shrewd, and as much given to practical jokes as to practical business. But whatever their personal characteristics may be, they are fortunate in having a journal which so happily illustrates the better side of human nature—in the furniture trade.

Synopsis of Building News.

Akron, O.—Architect F. O. Weary reports that there is considerable building going on this year. Carpenters and bricklayers are all busy now. This architect has finished drawings for a fireproof stone courthouse, 76 by 105 feet, for Carroll county, O., to cost $100,000; also for Carroll County Jail, to cost $40,000; a brick business block for Seil & Day, to cost $10,000; a brick market building, 60 by 80, for Wm. Barnett, cost $5,000; the above two under way; W. B. Doyle & Co., builders. Frame residence for Aaron Wagoner, to cost $4,000; under way; Col. D. W. Thomas, builder. Frame dwelling, Queen Anne style, for Mr. Chas. Baird, to cost $5,000; projected. An Episcopal church, 125 by 90 feet, to be built of stone, cost $75,000; drawings under way. A brick schoolhouse, 116 by 120 feet, for city of Akron, to cost $75,000. A frame dwelling, for Mr. Wm. Hardy, to cost $5,000. Mr. Weary, it will be remembered, was the architect of the new "Hotel Buchtel," which has recently been opened, and is one of the most important improvements in Akron lately.

Bloomington, Ind.—Architect J. L. Nichols reports that work is about closed up for the spring season, and is not likely to begin again until after election. Mr. Nichols is at present engaged upon the following work: For himself a neat cottage ("Old English" style), 35 by 48 feet, cost about $2,000. For Jennie Nichols, a cottage, 30 by 32 feet, to cost $1,200; under way. For Prof. J. B Clark, a two-story frame residence, 42 by 57 feet, to cost $3,000; projected. For Fred Fess, one-story cottage, 32 by 39 feet, to cost $1,400; projected.

Bradford, Ill.—Architect Ira F. Hayden reports for Deyo Bros., brick store building, two story and basement, 32 by 80 feet, cost $5,000; just completed. For Decker & Mayheve, brick market building, one-story and basement, 28 by 62 feet, to cost $3,000; under way. W. M. Leet, one-story brick bank building, 42 by 62 feet, to cost $7,000; under way. For W. M. Pilgrim, brick store, 28 by 80 feet; plans just completed; cost not estimated. Also a barn, 40 by 60 feet, for Thos. Hall; cost not estimated.

Chicago, Ill.—The building season is now influenced by the usual midsummer inactivity, as far as the architects' offices are concerned. But little new work is being let, the capitalist proposing to spend the next two months "fishing" rather than figure over leases, corner lots, office buildings or residences, and so the architect can "go fishing" too, and take his much needed rest after an unparalleled season of activity. This only relates to new work, and in even that relation the midsummer business will be, if anything, above the average. In the work under way everything is progressing with perfect smoothness and dispatch. The architects who are engaged upon the large office buildings are very busy. The builders are all at work and the supply of workmen not far ahead of the demand, and the year will be filled by those who are at work upon residences finishing to commence others, and those upon larger work to steadily push the work in order to have buildings finished by spring. Thus there is very little inactivity observable, and the material man is more apt to say two much work than too little. The architect, builder or material man who can snatch a few weeks now from his business and get away for a brief rest will be wise to do so, for the fall promises to be exceedingly busy.

The building in the outskirts of the city is steadily progressing. The real-estate firms who have gone into building with their usual enterprise and ability are, besides making good returns for their investments, doing much, or in fact all that is being done, to solve the question of the masses of "Where shall we live?" These cottages are, as a rule, well planned, well constructed and of tasteful exterior, some of the best architects in the city being employed in their planning.

Haverly's theatre is undergoing a reconstruction as far as the entrances are concerned, and that only. The plans drawn by New York architects last spring proved more expensive than the management cared to sustain, and the work was laid aside, and architects Adler & Sullivan were called in to remodel the entrances. This will consist in practically throwing open the entire front for exit. The space is divided by two brick walls, the spaces on either side being formerly used for stores, and these will be connected by wide arched entrances with the foyier, and be used as art galleries, also giving exit to the street. The decorations will be very extensive and will be executed by Messrs. Healy & Millet. The work in the decoration of the entrance being a combination of papier-mache and stained glass. Elaborate stained glass will fill the arches over the curtained entrances in the foyier, and will give to this house the most elaborate entrance of any of our theatres. While the architects can attempt nothing in the way of changing the original construction, the displaced portion will be improved in these architects' hands, and the theatre, when they have completed their work, will certainly be more safe, as well as more convenient, than ever before. A lot in the rear of the building, 25 by 65 feet, will be built on, forming dressing and scene rooms, connecting with the stage. The original project of a thorough reconstruction of this theatre is not given up entirely, but it is safe to say this improvement is all that will be attempted for some time to come. The body of the house remains without change.

The city parks were never in better condition than now, and with the late additions and improvements make Chicago, in picturesque surroundings, as well as agreeable climate, a "garden city" and a "summer resort" that is unequaled by any metropolitan city. Lincoln park has recently been enlarged, the main feature being a new lake, half a mile long, added to the north end. The refectories opened to the public last season in Lincoln, Garfield and Douglas parks, and built by architects W. L. B. Jenney, Burnham & Root, and John M. Van Osdel, are all well arranged, and besides their picturesque effect are well patronized by crowds of visitors. One thing that spoils the harmony and should be regulated, if not suppressed, is the eternal ringing of immense gongs to recall boats. No one apparently heeds them except the visitor who seeks rest and quiet and finds pandemonium. The attendants are universally attentive and are faithful in discharging their duties, and the park system is destined in the near future to join with her architectural beauty and make Chicago famous.

It is gratifying to see the amount of granite pavement being laid on the principal streets of the south side. This granite is mainly brought from Wisconsin, though some of it from famous Eastern quarries. Medina stone has been used, and with good results, in some instances. The street is first prepared with a solid mass of rubble with a layer of fine gravel on top, then rolled with a steam roller. The blocks, which are about 11 by 6 by 4 are set on edge, very fine gravel is then sprinkled over the surface and brushed into the interstices with heavy brooms, and then hot asphalt is poured into the cracks, cementing them together. The law is that pavement so laid must not be disturbed, and the telegraph and other companies, who should have had the foresight to place their wires under ground before this was done, will now have to rent space under the sidewalks. The gas companies can repair no leaks without trouble, and on the whole the shortsighted policy which has prevented the building of capacious tunnels for the reception of all underground requirements will soon be regretted by both the city and the business public.

The finest exhibition of foundations for large structures it is the fortune of architects to see is now "on exhibition" along La Salle street. All the large structures mentioned in previous issues are being pushed with a rapidity commensurate with perfect building.

The Board of Trade building is under roof and the tower is beginning to show some of the massive effects it will gather from its granite formation. The committee is severely criticized for their treatment of the competitors for the stained-glass work; and while they met the usual fate of all who place technical work, whether it be architectural or artistic design, before judges who know nothing of the merits of the work and are mainly governed by "influence" in deciding, it does not relieve those judges of the charge of bad faith if such charges are brought and substantiated. It seems to be the opinion of those interested, that though they were not fairly treated, the fortunate firm is as capable as any in the country to produce designs wholly creditable and artistic.

Architects Burling & Whitehouse are building a residence for J. C. Easton, of La Crosse, Wis. It is a large, handsome building, 50 by 80 feet, two-stories high, slate roof, gables and tower, finished in native stone. Also a stable and gardener's lodge, in same style of architecture, cost $30,000. Also block of six buildings, stores with apartments above, for C. G. Wicker, Thirty-eighth street and Cottage Grove avenue, will be finished in first class manner, with brick and stone trimmings. Also residence for P. Florsheim, on La Salle avenue, brick and stone, high roof, gable front, 25 by 70 feet, three stories, entirely of Lake Superior stone, rock-face finish, cost about $20,000. Also two stores, with flats above, for Judge Trumbull, near Cottage Grove avenue, 50 by 70 feet, three stories high, brick and stone, cost $20,000. These architects are also erecting St. Clement's Episcopal church, corner of State and Twentieth streets, which is progressing rapidly, being now nearly half done.

Architect J. W. Ackerman is building for F. Follansbee a row of three brick dwellings and one residence for himself on the corner of Twenty-third street and Calumet avenue. The three houses are 57 by 31 feet, built of brick, Bedford stone trimming, two stories and basement, the whole costing about $9,000. The residence is 24 by 57 feet, of brick and terra-cotta panels and stone trimming, two stories and cellar; cost $8,000. Also for Mrs. J. Phillips, stores and flats at Thirty-fourth and State streets, 25 by 62 feet, three stories, pressed brick, limestone trimming; cost about $8,000. Also for James Dillon, on Wentworth avenue near Thirty-first street, a residence, three stories, 23 by 57 feet, of pressed brick, limestone trimming; cost about $6,000. Also for John Richter, at 46 Granger street, a residence, three stories and cellar, 24 by 65 feet, of pressed brick and Potomac brownstone; cost $7,000. Also for Alderman Cullerton, two-story store building, on Throop and Twentieth streets, 24 by 80 feet; cost $6,000. Also for Mr. Eldrid, a residence, two stories and cellar, of pressed brick, with terra-cotta trimmings, 24 by 52 feet; cost about $8,000.

Architect W. L. Carroll has planned for W. E. Hall a brick flat building, three stories and basement, at 105 and 107 Aberdeen street. The building is 50 by 70 feet; cost about $10,000. One of the principal features of these flats is a passageway in the center running directly through the basement, treated as an ornamental feature in front.

Architect J. M. Van Osdel has plans for a residence for C. S. Wilcox, at 2331 Wabash avenue, of brick with brownstone trimmings, three stories and basement, 68 by 26 feet, cost about $6,000. Also for John Sullet, a residence, three stories, basement and attic, on West Jackson near Loomis street, 60 by 30 feet; cost about $15,000. Also two dwelling-houses on West Adams street, near Oakley, for G. W. Maynard, 66 by 80 feet, three stories and basement, of brick and brownstone trimmings; cost about $16,000.

Architects Bauer & Hill have planned for the Franciscan Sisters a House of Providence for unemployed working girls. It is 94 feet on Market street and 84 on Elm, four stories and basement, built of Indiana pressed brick, in Romanesque style of architecture. The basement is used for the kitchen, dining-room and storeroom. The first floor contains offices, reception rooms and a large chapel with vestry rooms, a few bedrooms, bathrooms, etc. The three principal stories are used entirely for bed and bath rooms. The purpose of the house is for boarding females without employment, and is under the charge of the Franciscan Sisters, who only charge a small sum to make the institution self-sustaining. Similar institutions exist in St. Louis and Milwaukee. The contracts have been let for the eastern wing, which will be completed during the latter part of the fall. The interior will be entirely finished in Georgia pine, the floors, also being of this material, as the order does not permit them to lay carpets.

Architect C. O. Hansen has planned a residence for E. C. Lewis at 1450 Michigan avenue.

Architect Theo. Karls has planned for Boese & Klockner, 628 and 630 Milwaukee avenue, a building 50 by 95 feet, four stories and basement, Anderson pressed brick fronts; cost $25,000. Also for F. F. Brines, a residence at 575 La Salle avenue, 30 by 75 feet, three stories and basement, brick building, built of Baltimore brick front, and cost $18,000. Also for John Willems, 525 La Salle avenue, three-story flats and cellar, 25 by 86 feet, Anderson pressed brick front; cost about $12,000. Also for Mrs. Joe Roelle, 625 Sedgwick street, a three-story and basement building, flats above, 25 by 80 feet, of Anderson pressed brick; cost $11,000. For Philip Benz, on the corner of Hoyne avenue and Congress street, a three-story brick flat, 25 by 56 feet; cost $7,000. For Andrew Nelson, on Chicago avenue near Townsend street, a store building, three stories and basement, 26 by 90 feet, Anderson pressed brick front; cost $12,000. For Mr. Kuhner, on the corner of Clark and Superior streets, a four-story store building, with flats above and basement, pressed brick fronts, 45 by 60 feet; cost $20,000. For Chas. Keifer, corner of Division and State streets, store building, 25 by 68 feet, flats above basement, four stories, pressed brick front; cost $11,000. For B. J. Murphey, on Fourteenth street, near Wabash avenue, a store building, three stories and basement, pressed brick, 72 by 25 feet; cost $11,000. For Mrs. N. Dieden, corner of Wells and Hill streets, three stories, flats and basement, 27 by 70 feet, pressed brick front; cost $11,000.

Architect J. H. Moore has planned for D. S. Munger, at 86 Loomis street, a brick residence, brownstone trimmings, two stories and basement, 56 by 24 feet; cost about $5,000; Geo. Moore, builder.

Architect L. G. Halberg: Making alterations in a Congregational church, to cost $5,000; also building for Hon. H. M. Shepard on Grand Boulevard, a two-story, basement and attic residence, 73 by 50 feet; cost not estimated. For Dr. Brophen, on Monroe street near Western avenue, two houses, 36 by 83 feet, moulded brick front, stone trimmings; cost about $10,000. For Mrs. A. Warner, on Dearborn avenue, a dwelling 70 by 21 feet, front of pressed brick, ornamented with terra-cotta, interior finished in hardwood; cost $10,000.

Architect J. Zittle: For Mr. Chas. E. Hurd, at 206 La Salle avenue, a three-story and basement flat building, 20 by 77 feet, brick with stone trimming, to cost $6,000.

Architect C. L. Stiles has drawn plans for a factory building for Price & Kaufman, galvanized iron workers, at 21 North Green street, building to be 25 by 120 feet, three stories and basement, built of brick, front of Indiana pressed brick and Carbondale brownstone. For Mr. E. Todd, at 313 Park avenue, a two-story and basement residence

23 by 40 feet, Anderson pressed brick, front trimmed with brownstone; cost $8,000. For Mrs. Newman, Depuyster and Desplaines streets, a two-story tenement house, 25 by 60, Indiana pressed brick fronts; cost about $5,000.

Architect W. H. Furber has plans for a brick schoolhouse, 142 by 72, two stories, containing 12 rooms, at Aurora, Ill. The building will be fireproof, the arrangements for heating and ventilation are very good; cost of building, $35,000. For Mrs. Ford, on Oakwood boulevard, a double tenement house, 50 by 70 feet, three stories high, to be of pressed brick and terra cotta; cost about $15,000.

Architect A. M. L. Colton is building for Mrs. Down, a residence, 25 by 48 feet, two stories and basement, of brick, at 115 Centre avenue, near Van Buren street; cost $4,500.

Architect F. R. Schock is preparing plans for Mrs. Williams for a brick residence on the corner of Thirty-second and South Park avenue, to cost about $10,000.

Architect J. L. Silsby is building a residence on the corner of Bank street and Richie place, for Wm. Waller, of pressed brick, three stories, 30 by 60 feet; cost about $20,000. Also a house on Cedar street, near lake shore drive, for Mrs. Potter Palmer, of pressed brick and terra-cotta, 26 by 60 feet, to cost about $10,000. A house on Richie place for Mr. Potter Palmer, of stone, pressed brick and terra cotta, three stories and basement, 36 by 60 feet; cost about $15,000.

Architect J. J. Flanders is building the Haven school, 138 by 82 feet, four stories high, on Wabash avenue, between Fourteenth and Sixteenth streets. It is of Indiana pressed brick with terra-cotta trimmings; cost about $75,000. Also the Thomas Hoyne school building on the corner of Cass and Illinois streets, built of Indiana pressed brick and terra cotta, three stories high, 124 by 80; cost about $50,000. Also the Lime street school, near Twenty-seventh street, same dimensions as above, built of Indiana pressed brick; cost about $45,000. Also the Arnold school at Burling and Center streets, 124 by 80 feet, three stories high, of Indiana pressed brick and terra cotta, the third story being treated as a mansard roof; cost about $45,000. Also the Holstine school on Courtland street, near Milwaukee avenue, a twelve-room house, 85 by 90, three stories high, of pressed brick and terra cotta; cost about $35,000. For Dr. McKillop, a brick barn, at 1639 Wabash avenue, two stories and basement, 33 by 77 feet; cost about $15,000. Also a frame residence, 52 by 30 feet, for Mrs. Irish, in Hinsdale.

Architects Edbrook & Burnham have on hand a handsome little villa for Mr. Brewer, at Fairbury, Ill. It is a frame structure, 32 by 46 feet, two stories and cellar; cost $3,500. Also a frame residence for A. S. Kirk, eight rooms, two story and cellar; cost $4,000. For Prof. L. N. Stratton, a large two-story frame residence, 50 by 60 feet, with cellar; cost $6,000. Also for John B. Kirk, at Evanston, a fine residence, 50 by 80 feet, of green stone, three-stories high, with cellar; cost $30,000.

Architect Wm. Longhurst is building for F. A. Healiner, a three-story and basement flat of Anderson pressed brick and stone trimmings, 26 by 72 feet, at 221 Michigan avenue, cost $12,000; C. P. McKay, builder. Also the following miscellaneous buildings: For B. Wygant, a brick dwelling, at 369 Park avenue, two-story flats and cellar, 20 by 65 feet, cost about $5,000; a front addition to a building, four stories high, 1616 Wabash avenue, of brick, with stone trimmings, cost about $5,000; on the corner of Thirty-fifth and State, an addition stone front and story on top, cost $5,000; on Michigan avenue and Twenty-second street, adding another story and addition to rear of residence, cost $4,000; preparing plans for two houses on Thirty-first street between Wabash and State, of brick, with stone trimmings, cost $4,500; on Ashland avenue between Walnut and Fulton streets, brick house, cost $5,000. Also just completed at Ravenswood, a residence for Chas. Bushnell. It is frame, two stories and attic, 24 by 40 feet, cost about $2,000. Also completed for D. Harry Hammer, two store buildings, near Thirty-fifth on State street, three stories and cellar, stone fronts, flats above, 24 by 66 feet, cost about $16,000. Also four more between Thirty-seventh and Thirty-eighth, the same as above, cost about $16,000. Also similar buildings for Mr. Beck and Mr. Nickelson, between Thirty-seventh and Thirty-eighth, of brick, stone fronts, 24 by 34 feet, cost about $14,000. Also on Dearborn street, near Thirty-fifth street, two-story dwelling-house and flats, with cellar, 22 by 52 feet, cost $5,000.

Architects Treat & Foltz have commenced work on a brick factory for F. Reckenberg, on Ann and West Randolph streets. It is 50 by 170 feet, four stories, cost about $15,000. Also making several important changes in the American Express building, enlarging the offices to give the entire capacity of the first floor for the general offices. Also finishing the St. Luke's Hospital, which is built of brick and consisting of four buildings, containing the administration, kitchen, autopsy, medical and surgical departments. It is 250 by 250 feet, cost $135,000. Also an addition to W. W. Kimball's house on Michigan avenue, cost about $2,000. Also an addition to G. H. Fargo's house on Michigan avenue, near Twenty-third street. It has a mansard roof, cost about $5,000. Also rebuilding C. P. Libby's barn on Thirty-fourth and Michigan avenues, about 40 by 30 feet, cost $6,000. Also a stone addition to A. McNeal's house on Thirty-second and Michigan avenue, cost $8,000. Also building a residence for E. Barbour, on Delaware place near State, 25 by 68 feet, of pressed brick, stone trimmings, three stories and basement, cost about $9,000. Also a double store building, on North Clark street, near Lincoln avenue, for E. J. Lehmann, 48 by 80 feet, three stories and basement, of greenstone and terra-cotta, cost about $15,000. A stable for H. T. Wait, on Astor street, cost $4,000.

Cincinnati, O.—There is a large amount of building going on. The season, which thus far has been a very prosperous one, bids fair to continue so throughout the summer. Contractors are busy, labor is well paid, and on the whole the outlook is very favorable.

Architect A. C. Nash has completed plans for a new Jewish synagogue. The foundation walls are now being erected on the lot on the northeast corner of Mound and Richmond streets, which covers an area of 74 by 95 feet, and the building will have a frontage of 69 feet on Mound street, extending along the Richmond street side 82 feet. In architectural style the temple will be Norman simplified, and the details are intended to follow the order of the Gothic of two centuries later. The exterior, both front and side, will be executed with blue river stone in fine broken ashlar work, and trimmed with light-colored Bedford stone. The main hall, which, of course, will be used for devotional exercises, will be 24 feet high at sides, while a concaved ceiling rises to the height of 38 feet in the center. This will be richly decorated with ribs, bosses and other embellishments. A large gallery, erected for choir service, will stand over the vestibule with an open colonnade. The main entrance, which will be on Mound street, will be 15 feet wide, with a height of 33 feet. This, on the plan, is divided into three compartments with three doors, surmounted by a great rose window. Over the main entrance will be a gable, with a peculiar arrangement of seven windows, and the side view of the building is very similar in this respect. Two turrets, each 8 feet square, will ascend to the distance of 70 feet, and these, with a tastefully arranged slate roof, will lend beauty to the structure. When finished this edifice will be unlike any church in the city, the architect having in view the idea of constructing a house of worship that should be the duplicate of nothing hereabouts. The seating capacity of the place will be nearly 1,000, and the cost of ground and building will exceed $45,000. It is expected that the finishing touches will be put upon the house by the first of January next.

Among the building permits recently issued are the following:—P. McAvoy, for D. Forrester, to build five-story brick Nos. 126 and 128 west Second street, to cost $9,200. John Matre, for Jacob Adler, to build two-and-a-half-story brick east side Jefferson, between Calhoun and Corry streets, to cost $3,400. Miller & Roenne, for H. Grufenkamp, to build four-story brick No. 42 Freeman avenue, to cost $4,000. Miller & Roenne, for H. Drees, to build three-story brick, southeast corner Freeman avenue and Dayton street, to cost $9,000. G. Ludwig, for C. Johnson, to build addition to two-story brick, west side Chatham, between McMillan and Locust streets, to cost $2,000. Storrs Congregational Church, to build church building, junction Warsaw Pike and State avenue, to cost $6,000. Jno. H. Lindeman, for Jacob Adams, to build two-and-a-half-story brick, east side Vine, near McMillan street, to cost $3,300. G. F. Nieber, for Boylan Estate, to build five-story stone front, north side Fourth, between Vine and Walnut streets, to cost $30,000. F. Wibbelsmann, for J. H. Feldhaus, to build three-and-a-half-story brick, southeast corner Neave and Stabler streets, to cost $6,000. H. Grotlesch & Co., to build three-story brick, southwest corner Hunt and Lockport avenue, to cost $10,000. Wm. H. Stewart's Sons, for Dr. Smith, to build three-story brick, No. 128 Eighth street, to cost $12,000. J. W. Ashar & Son, for Thomas McIlvaine, to build three-story brick, east side Ludlow, between Pearl and Third streets, to cost $5,000. J. B. H. Nolte, for Davis & Gould, to build six-story brick factory, southwest corner Faulkner and Wade streets, to cost $25,000. Belmont & Overbecke, for Mr. Michaels, to build four-story brick, north side of Thirteenth, between Clay and Main streets, to cost $3,500. Belmont & Overbecke, for John Schulte, to build three-story brick, No. 125 Betts street, to cost $4,000. J. W. & T. G. Robinson, to build three two-story bricks, southeast corner of Park and Warsaw Pike, to cost $7,000. John Crotty, for J. R. Kane, to build two-story frame, east side of Third, between Collard and Washington streets, to cost $2,000. Frederick Neiderhauser, to build two-and-a-half-story brick, west side Madison, near Boone street, to cost $4,000. A. W. Bennewitz, for August Bode, to build three-story brick, No. 72 Martin street, to cost $3,900.

Cleveland, O.—The building season has been unusually brisk, a great deal of work has been and is now being done in the way of first class buildings. The foundation for the immense apartment house in course of construction on Erie street, near the corner of Superior street, is already laid, and work will be pushed forward so as to complete the new building as soon as possible. This new structure, four stories in height, the lowest to be divided into six stores and the upper stories into apartments for families, is being built by Mr. W. H. Doan at great expense, and will be another addition to the many beautiful buildings which have recently sprung up in Cleveland. It promises to be a credit to the city and an ornament to the vicinity. It will front 122 feet on Erie street, extending back nearly 100 feet. The front will be built of pressed brick and stone, and will be highly ornamental. The interior, which will be arranged for families, will be finished in the highest style of art, and as an apartment house it promises to be complete in all its details. It is also proposed to use one of the storerooms as a restaurant for the accommodation of the tenants.

Architect Levi T. Scofield has drawn plans for, and is superintending, extensive alterations in the courthouse at a cost of about $75,000; Thomas Linas is the contractor.

Architects Coburn & Barnum: For Judge Boynton, Euclid avenue, a stone house, cost $15,000; Scott & Collister, contractors.

Architect N. P. Charlot: For Thos. Maher, block of four stone houses on Superior street, cost $35,000; Barney Rattigan, contractor.

Architect J. M. Blackburn: For Haber Bros., a brick block on Perry street, cost $12,000; L. Dantel, contractor. For Elias Sims, a brick block on Pearl street, cost $25,000; Co-operative Building Co., contractors.

Architects Cudell & Richardson: For Wood Bros., a brick block on Pearl street, cost $15,000; Henry Leth, contractor.

Architect Theo. Rosenberg: For Mr. James Dickinson, a double frame house on Bridge street, cost $5,000; Laudreth & Lapella, contractors.

Architect F. Norton: For Mr. Jas. Barker, a brick and stone block of five houses, cost $15,000; Jno. Gill & Son, contractors.

Architect Samuel Lane: For Mr. Jas. D. Ving, a frame dwelling-house on Osborne street, cost $3,000.

Architect A. Mittermiller has plans for the Lutheran church on Scranton avenue, cost $30,000.

The following building permits have recently been issued: Sherwin & Williams, factory on the Valley Railway, cost $10,000; Henry Slatunyer, contractor. Pat Smith, brick tenement on Summit street, cost $10,000. Scofield, Shirmer & Teagle, oil house, cost, $5,000; Jno. T. Watterson, contractor. Jno. Stewart, frame dwelling on Hoadley street, cost $3,000. L. O. Rawson, double frame dwelling on Case avenue, cost $9,000; I. W. Flora, contractor. Geo. S. Wright, double house on Franklin court, cost $3,500; I. W. Flora, contractor. Fred Keppler, two frame dwelling-houses on Woodland court, cost $2,500 each; Jno. V. Enning, contractor. Cleveland Storing Co., storehouse on Scranton avenue, cost $35,000; Jno. T. Watterson, contractor. Fire engine-house on Walnut street, brick and stone, cost $7,000. Samuel Truscott, brick barn on Longwood avenue, cost $3,500.

Coldwater, Mich.—A large number of small buildings being erected for which no plans are drawn. Outlook favorable.

Architect M. H. Parker, for Mr. Geo. Greenwood, a two-story dwelling, 28 by 48 feet, to cost $2,500; under way; Jno. Holt & Son, builders.

Columbus, O.—Architect J. W. Yost has prepared plans for new courthouses for both Belmont and Holmes counties, which have been adopted by the County Commissioners.

Davenport, Ia.—There is considerable work being finished, but the outlook is not very promising.

Architect J. W. Ross reports: For James McIntyre, a two-story frame dwelling, 35 by 50 feet, to cost $2,500. For M. S. Brown, one-story frame dwelling, 50 by 40 feet, a one and one-half story barn, 28 by 34 feet; cost of both, $2,200. For Mr. H. Hammond, two-story dwelling, 38 by 50 feet, to cost about $6,000; Eddy, Kelley & Mahan are the contractors. For Mr. Charles Rose, two-story frame dwelling, 38 by 54 feet, to cost $5,000; Eddy, Kelly & Mahan are the contractors. Iowa Soldiers' Orphans' Home, three-story brick building, 63 by 90 feet, with slate roof, to cost $50,000; John Volk & Co., contractors. For J. M. Syter, two-story frame dwelling, 35 by 54 feet, to cost $5,000; J. H. Whitaker, builder. For M. L. Marks, two-story frame dwelling, 40 by 58 feet, to cost $7,000; J. H. Whitaker, builder. A one-story frame church, 32 by 50 feet, to cost $2,500. For Rock Island Stove Company, two-story brick warehouse, 40 by 90 feet, to cost $4,000. For Mr. W. B. Ferguson, a two-story frame dwelling, 38 by 50 feet, to cost $9,000; S. J. Collins is the contractor. For Mr. A. J. Preston, Mr. A. L. Dart and Mr. J. V. Van Patten, additions and repairs to cost $4,000, $3,000 and $2,500 respectively. All the above are under way. For Mr. Simon, a two story frame dwelling 48 by 36 feet, to cost $3,800; contract not let. For Mr. C. J. Dart, two-story brick dwelling, 50 by 56 feet, to cost $12,000; contract not let.

Des Moines, Ia.—Two brick business buildings are in course of erection on the corner of East Sixth and Des Moines streets. Rev. Kooker is building one and Dillon & Co. the other; both are to be two stories, and good sized, well furnished rooms. These are the first business houses on Des Moines street. Work is being rapidly carried on to put in the foundation for the Wagner block on the corner of East Sixth and Locust.

Architects Swope and Schreiner, formerly of Princeton, Ill., report the following work: For Mr. John B. Shuster, building 44 by 132 feet, to be used as wholesale house, to cost $5,000; under way. For Mr. L. Bolton, store building, 24 by 65 feet, to cost $3,000; under way. For Mr. R. Schabin, a residence, 24 by 40 feet, to cost $2,000; under way. The above three buildings are in Des Moines. For a stock company in Princeton, Ill., an opera house, 64 by 134 feet, to cost $18,000; Eli Mathews, builder. For Mr. S. J. Clark, Princeton, residence, 24 by 60 feet, to cost $3,500; under way. For Mr. P. Hensil, Princeton, a residence, 24 by 68 feet, to cost $4,000; under way; John Thompson, builder. For Mr. John Degroff, residence, 24 by 48 feet, to cost $2,500. For Father Reardon, at Princeton, a residence, 28 by 60 feet, to cost $4,000; A. L. Davis, builder. For Dr. Kellogg, a drug store, 24 by 60 feet, to cost $4,500. At Kewanee, Ill., a Catholic church, 42 by 110 feet, to cost $15,000; under way; A. L. Davis, builder. For Hon. M. R. Deway, at Princeton, residence, 40 by 60 feet, to cost $6,000; plans drawn; A. Johnson, builder. For Mr. A. F. Call, Algona, Ia., residence, 40 by 48 feet, to cost $4,000; under way.

Present outlook not very encouraging, with very little good building being done. A number of small houses, where no architect is employed, are under way, and projected.

Architect W. L. Black reports: For Mr. C. W. Pitcairn, a three-story building, containing three storerooms and eight apartments. The structure will be of brick, with stone front, handsomely carved; it is to have a tin roof, galvanized iron cornice, plate and stained glass in front, and all modern improvements; cost, $17,000 ready for roof; Hand & Carter, builders. For Mr. Thos. Hatton, frame residence, 48 by 56 feet, slate roof, interior to be finished in hardwood, to cost about $10,000; materials on the ground and bids just called for. For Ind. School District, Des Moines, addition of three rooms to "Longfellow" building, 25 by 42 feet, also the new "Emerson" building, four rooms, both of brick, with stone trimmings, ready for roof, to cost $12,000; Wm. B. Christy, builder. For Rev. A. J. Kooker, two-story store and apartment building, 21 by 80 feet, to be of brick, stone trimmings, plate-glass front, to cost $8,000; foundation in; Wm. B. Christy, carpenter; H. Dillon, mason. For Mr. H. Dillon, two-story store and apartment building, 21 by 80 feet, to be of brick, stone trimmings, plate-glass front, etc., to cost $6,000; foundation in; Wm. Christy, carpenter; H. Dillon, mason. For C. P. Viele, at Stuart, Ia., a two-story frame residence, 30 by 48 feet, interior finished in hardwood, heating by steam, to cost $4,200; under way. For Dr. H. C. Huntsman, at Oskaloosa, Ia., a two-story store and office building, 20 by 71 feet, brick, with stone trimmings, plate-glass front, to cost $5,000; foundations in; no contracts let.

Detroit, Mich.—Outlook not as encouraging as it was last month.

W. G. Vinton has been awarded the contract for building the addition to the Public Library building. His bid was $31,910, and the work will begin at once.

Gordon W. Lloyd has begun the erection of a new business block at No. 77 Larned street west, and he will also erect a new building at No. 73 Larned street west.

Architects W. Scott & Co. have forwarded plans for the big boathouse and the grand stand to be used for the Northwestern regatta at the Oakland this month. Both will be so constructed that they will be of permanent service.

Architect Henry Engelbert: For Schmitt & Co., six two-story and basement brick and stone dwellings, each 22 by 38 feet, to cost $13,000; projected. For Frank A. Dejat, two-story brick and stone dwelling, 28 by 60 feet, to cost $5,000; under way. For St. Albert's Church, brick and stone building, 104 by 208 feet, iron columns, slate roof, to cost $75,000; under way; Patrick Dee and Spitzley Bros., builders. For Chas. Protiva, a two-story brick and stone dwelling, 24 by 60 feet, to cost $3,500; under way. For Richard Rogatzky, a two-story brick and stone dwelling, 22 by 60 feet, to cost $3,600; under way. For Philip Kling, three three-story store and flats and Masonic hall, 66 by 50 feet, to cost $12,000; under way; John Boeberitz, jr., and Frank Wittman, builders. For M. Stryskal, cottage, 24 by 28, to cost $600.

Eau Claire, Wis.—The outlook, although fair, is not as good as last year. Mechanics are all busy at present. Prices range about 25 per cent lower than in 1883.

Work has been commenced on the new jail, and the North-side school building is well under way.

Architects Garnsey & Hinds report as follows: For Mrs. G. R. Porter, a pressed brick residence, 44 by 69 feet, to cost $21,000. For Mr. H. M. Stocking, a frame residence, 32 by 44 feet, to cost $6,500. For Stocking Bros., a brick store, 26 by 50 feet, to cost $4,500; also school building in District No. 1, 55 by 70 feet, to be constructed of brick and wood, cost $9,500. F. E. Hinds is the builder of all the above, which are near completion.

Fredericktown, Mo.—The building business will be very dull this season. Architect R. Albert reports a two-story building, 36 by 69 feet, brick and iron construction, to be used as a hall for I.O.O.F.; cost $3,500. The architect is the builder.

Grand Rapids, Mich.—The substantial buildings now in course of completion exceed in number, quality and cost, any season's work in the history of Grand Rapids. It is noticeable in the scores of blocks now going up that a careful regard is being paid to general architectural effect. Massive foundations are the rule, while compressed red brick and stone are used almost exclusively throughout the structures. Resident mechanics have been kept fairly busy during the season.

Howard, Minn.—Contractor Ashley has nearly finished his work on the new Wright house. It is a fine structure and an ornament to Howard. Goold Bros'. new roller mill is fast getting in shape, the frame being up and nearly enclosed. It is less than three weeks since the foundation stakes were driven.

Illinois Corporations.—Licenses to incorporate stock companies were issued by the secretary of state to the organizers of the following new companies:

The Brachvogel & Press Manufacturing Company of Chicago; capital, $75,000; to manufacture mouldings, picture frames and mirrors; incorporators, Adam J. Press, Christina Brachvogel and Charles H. Brachvogel.

George Palmer & Co., at Chicago; capital, $200,000; to do a general lumber business; incorporators, Charles H. Bogue, Horace Williston and George Palmer.

Chemical Wood Finishing Company of Chicago; capital, $10,000; incorporators, Adolph Cohn, Frederick H. Herhold and Charles Seegers.

The Baker Fire Escape Company of Chicago; capital, $300,000; incorporators, Christian E. Baker, Charles Eggert, Daniel W. McGillicuddy, Nathan R. Wakefield and H. Burgheim.

The Chicago Murano Art Glass Company; capital stock, $100,000; incorporators, Francis Le Baron, John Charles Devoy and Frank L. Fort; the object is to manufacture glass in all shapes.

The Interior White Lead Manufacturing Company, at Chicago; capital stock, $500,000; to manufacture white lead by a new process; incorporators, George H. Smith, W. F. Howe, C. D. Hooker, P. R. Isham and W. S. Berkshire.

Union Scaler and Tally Company, Chicago; capital, $15,000; incorporators, J. L. Ballard, E. W. Farnham and J. C. B. Andrews.

Hopkins Vapor Stove Manufacturing Company, Rockford; capital, $50,000; incorporators, Roscoe C. Barnes, E. C. Hopkins and John Barnes.

Chicago Lathing Company, Chicago; capital, $250,000; incorporators, James S. Price, W. H. Switzer and Pliny B. Smith.

Indianapolis, Ind.—The Indianapolis Terra-Cotta Co. have been awarded contracts for work in three insane asylums, aggregating $40,000.

Architects Hodgson, Wallingford and Stein report the outlook fair for fall business; has not been as much done this year as last. These gentlemen are at present engaged upon the following work: A Presbyterian church at Vincennes, Ind., to cost $20,000; under way. For Mr. Chas. Grate, store building, to cost $2,500. For Mr. J. F. Hatch, a residence, to cost $4,000; projected. At Indianapolis, for Mr. John Pressley, a residence, to cost $5,000; projected. Also for Mr. W. J. Richards, a residence, to cost $4,000; projected.

Ionia, Mich.—The building business is a little slow now, but prospects are good for a busy fall season. Mechanics are all busy, but the work is chiefly small houses, ranging in cost from $1,000 to $2,000.

Architect O. Waterbury reports the following buildings under way and approaching completion: The Ionia county courthouse, two and three-story, with basement, 117 by 76 feet, stone exterior, with brick trimmings, cost $45,000; Claire Allen, contractor. Criminal insane asylum, two and three-story, about 300 feet long by 36 and 80 feet wide, to cost $50,000; Waterbury & Badger, contractors For Mr. J. W. Baldie, a two-story brick veneer residence, to cost about $1,800; Jas. McGarey, contractor. Also three hose-cart houses, 26 by 19 feet, to cost $750 each. For Geo. Wurster, a two-story brick veneer residence, to cost $2,500; Goodman & Leigh, builders.

Jerseyville, Ill.—Architect Wm. Embley reports building progressing favorably and outlook good. He has the following work in hand: For R. P. Shackleford, a two-story frame residence, 30 by 55 feet, slate roof, to cost $3,500; R. A. Clark, builder. For G. W. Ware, a brick store and bank building, 48 by 62 feet; contract not let. For James Seago, a two-story frame residence, 30 by 58 feet, to cost $3,600; E. B. Scott, builder. For Dr. E. L. H. Barry, a one-and-a-half-story frame cottage, 30 by 38 feet, to cost $2,000; E. B. Scott, builder. For Chas. Kirby, a two-story frame residence, 36 by 56 feet, with slate roof, cost $3,800; Henry C. Leak, builder. For Mrs. A. M. Shephard, a two-story frame residence, 46 by 52 feet, to cost $7,000. For P. Dumphy, a two-story brick store building, 26 by 80 feet, to cost $4,300. For Dodson, Curtis & Co., a three-story mill, brick and stone construction, 36 by 48 feet, slate roof, cost $6,500. For Dr. R. B. Crawford, at Wayne, Neb., a story-and-a-half cottage, 38 by 44 feet, to cost $4,000.

Marshalltown, Ia.—There is some building talked of, but people are holding off until after election. The contract for the Courthouse has been let for $108,000, to Kirby & Howe.

Architect F. M. Ellis reports as follows: For Mr. W. E. Snelling, a two-story frame residence, 44 by 60 feet, to cost $8,000; under way. For Mr. Meeker, a two-story frame residence, 34 by 45 feet, cost $3,000: under way. For Mr. Frank Champlain, at Boone, Ia., a two-story residence, 40 by 56 feet, to cost $5,000; under way. At Council Bluffs, Ia., a brick one-story Gothic church, 63 by 92 feet, for the Presbyterian Society, to cost $25,000; under way. At Marion, Ia., for the Presbyterian Society, a two-story brick Gothic church, 60 by 63 feet, cost $20,000; under way. At Lincoln, Neb., a Congregational church building, one-story, 63 by 90 feet, to cost $18,500; under way. At Warsaw, Ill., a church building for the Episcopal Society, one-story, built of stone, 38 by 70 feet, to cost $7,000; under way. Preparing plans for a Baptist church, at Osage City, Ia., to be a frame building, 42 by 74 feet, cost $8,000. A two-story and basement brick school building, 70 by 78 feet, to cost $10,000, at Grundy Centre, Ia. At Cherokee, Ia., a high school building, two story and basement, 76 by 87, built of brick, cost $20,000. At Canton, D. T., a brick high school building, two stories and basement, 70 by 78 feet, to cost $10,000. At Charles City, Ia., a schoolhouse, two-story brick, 70 by 78 feet, to cost about $10,000. At Brainard, Minn., a very fine two-story and basement high school building, 86 by 90 feet, to cost $30,000. The five school buildings are under way. At Ordway, D. T., M. E. University building, four-stories and basement, 128 by 80 feet, to cost $50,000; excavating and plans under way. For Mr. E. C. Whitton, at Toledo, Ia., a fourteen-room "Queen Anne" residence, 44 by 65, to cost $12,000; under way. For J. W. Squires, at Council Bluffs, Ia., a "Queen Anne" residence, 44 by 65 feet, to cost $12,000; projected. At Macomb, Ill., McDonough County Insane Asylum and Almshouse, three stories and basement, 124 by 40 feet, to cost $30,000; under way. For Wells & Sons, at Boone, Ia., a three story and basement hotel building, 80 by 120 feet, to cost $25,000; plans under way. For W. Lirter, at Newton, Ia., a three-story and basement opera house and store building, 66 by 100 feet, to cost $25,000; plans ready.

Architect T. D. Allen reports the following work under way: At Stanton, Neb., a brick school building, 50 by 70 feet, five rooms, to cost $10,000. A brick bank and store building, 50 by 85 feet, for George Meisner, Esq., at Shelton, Neb., to cost $10,000. For J. B. Murdough, at Tama, Ia., a brick and stone hotel building, 50 by 85 feet, three stories and basement, to cost $15,000. For First National Bank, at Exeter, Neb, a two-story and basement bank building, 25 by 65 feet, to be built of brick and stone, to cost $5,500. Also a brick addition to district school building at Cambridge, Ia., two rooms, 26 by 50 feet, to cost $3,500.

Milwaukee, Wis.—The committee on public buildings of the board of supervisors have received the following bids for erecting the new poor-office, which is to be located near the city morgue, on River street: Herr & Mueller, $9,395; F. Rœdiger (not including plumbing and steam-heating), $8,800; Wm. Metz, $9,917; John Kraaz, $9,908; Julius Kuebner, $9,857; Charles Kraatz, $9,800; G. F. Steuwe, $10,000; Oscar Knie, $9,593; William Klocksin, $9,500. W. E. Goodman's bid for the plumbing was $423. The contract will probably be awarded to Herr & Mueller. The building is to be completed by fall. Among the recent permits issued is one to Mr. M. Rice for the erection of two brick dwellings and barns for John S. George and D. G. Rogers. The estimated cost is $21,000.

Minneapolis, Minn.—An architect, who neglected to send his name, reports for Harmonia Society, of Minneapolis, a three-story building, 87 by 120 feet, pressed brick fronts, stone and terra-cotta trimmings, first story to be used for stores and offices, second and third stories for hall and clubrooms, to cost $45,000; foundations nearly completed; B. Aronson, builder. For Peter Rauen, a three-story and basement corner building, 140 by 50 feet, pressed brick fronts, Ohio stone trimmings, first story for stores and corner for bank office, upper stories for tenement, cost, $28,000; John Gilman, builder. For Fritz Friederich, a three-story store and tenement building, 40 by 75 feet, pressed brick front, trimmed with cut stone, cost $11,000; John Gilman, builder.

Omaha, Neb.—Outlook for building not very flattering.

Architect M. B. Pullen reports the following under way: German Lutheran church, frame building, 26 by 50 feet, to cost $2,000; also frame cottages for Mr. R. L. Rees and Mr. W. L. Farrington. The buildings are to be 16 by 24 feet, and cost $2,000 and $1,800 respectively.

Architect C. F. Driscoll reports the following work: For the State of Iowa, at Council Bluffs, a two-story school building for the deaf and dumb, 81 by 138 feet, and a three-story chapel and dining-room, 61 by 70 feet, the former to cost $24,500, the latter to cost $13,500. For Messrs. Boyle & Frank, at Kearney, Neb., a three-story and basement store building, 50 by 130 feet, to cost $19,000. For Mr. H. B. Dexter, at Blair, Neb., a two-story and basement store building, 30 by 100 feet, to cost $5,200. For Mr. John Erk, Omaha, a two-story dwelling, 30 by 48 feet, and a barn 22 by 26 feet, cost of both $5,000. For Dr. Reed, at St. Paul, Neb, a two-story frame dwelling, 26 by 28 feet, to cost $2,400. For Mr. S. M. Nevins, at Kearney, Neb., a two-story frame dwelling, 24 by 28 feet, to cost $2,000. For C. I. Burminster, at Omaha, one-story store building, 20 by 100 feet, to cost $2,000.

Architect Sidney Smith: For John Ludwist, a three-story and basement store building, 22 by 66 feet, pressed brick front, with stone trimmings, to cost $4,200; under way; Ittver Bros., builders. For Alvin Saunders, a three-story and basement store building, 22 by 80 feet, pressed brick, terra-cotta trimmings, to cost $6,500; under way; Ittver Bros., builders. For E. Davis, a three-story tenement house, 36 by 66 feet, pressed brick front, terra-cotta trimmings, to cost about $10,000; projected. For E. Lodda, a two-story and basement store building, 66 by 132 feet, brick, with terra-cotta trimmings, to cost $12,000; under way.

Richmond, Ind.—Not much doing at present, and outlook not as encouraging as it might be.

Architect Jno. A. Hasecoster has under way: For the Board of Education, a two-story building, 80 by 65 feet, brick, with stone trimmings, mansard, slate roof and tower, cost $17,000; Kidder & Bettle are the contractors. For Mr. Geo. H. Knollenberg, a two-story stone and brick residence, 42 by 85 feet, with slate roof, cost $3,500; Thos W. Roberts, builder. For the Greenville Fire Department, at Greenville, O., a two-story engine-house, 42 by 85 feet, stone and brick construction, with slate roof and tower, to cost $7,500; M. Mendenhall, builder. For Mr. Chas. Jenkins, a two-story frame residence, with slate roof, cost $3,500; N. S. Little, builder.

Ripon, Wis.—Report says that considerable work is being done in and around Ripon. Mechanics are all busy at good wages.

Architect A. N. Barny reports the following: For Mr. L. E. Reed, a two-story bank building, 175 by 60 feet. It will be of Milwaukee pressed brick and stone, the ground floor to be used for bank and five stores, second story for offices. The building is nearly completed and will be a great improvement to the city. It will cost $14,000. Geo. Wren is the builder. For Mr. John Hass, a four-story brewery, 30 by 44 feet, stone and brick construction; under way; cost not estimated. For Mr. A. B. Pratt, a dwelling-house, to cost about $2,500. For Mr. A. R. Soper, a dwelling, 24 by 52 feet, to cost $1,500; M. Gove, builder. For Mr. J. Bowen, an addition to Ripon Knitting Works, to be two stories, 20 by 40 feet, built of brick; C. J. Derby, builder.

Salina, Kan.—The present condition, as well as the outlook, is good. This country is a wheat producing one, and being favored with unusually large crops the past two years, and the present one, the farmers are now building extensively, and a good class of houses, the year of 1884 will undoubtedly show great progress in building.

Architects Krueger, Parker & Co. report the following: Salina University, 101 by 55 feet, two-story, basement and attic, fifty five rooms, to cost $24,000; ready for roof. For Mr. John H. Prescott, a two-story frame dwelling, 24 by 62 feet, to cost $7,500; work has been commenced. For Messrs. Bartlett & Jenkins, a two-story brick store, 50 by 100 feet, cost not estimated; projected. For Mr. August Halmquist, two-story store building, 50 by 100 feet; cost not estimated; projected.

Seymour, Ind.—Architect J. Balsley reports the outlook fair, all mechanics are employed at present. He has the following work in his office: First Baptist church at Seymour, brick, slate roof, 71 by 97 feet, to cost $12,000. For W. F. Peters, at Seymour, pressed brick building, 42 by 54 feet, to cost $6,000; under way; J. Humes, carpenter, L. Anderson, bricklayer. Schoolhouse at Crothersville, Ind., 62 by 66 feet, to be built of brick, with slate roof, and contain six rooms, hall, etc., to cost $5,500; under way; A. Massman, builder. Also brick addition, 30 by 40 feet, and slate roof, for German M. E. church, to cost $2,000; contracts to be let July 15.

Sheboygan, Wis.—At a special meeting of the council, June 23, the school board was directed to proceed to let the contract for building a new schoolhouse, the maximum cost of which was fixed at $19,000, exclusive of heating apparatus and furniture.

Sioux City, Ia.—Architects Baldwin & Brown report the following work, with prospect of slacking up until the crops are assured: For Mrs. M. Franz, a brick veneer dwelling, 40 by 62 feet, roof tin and shingle, stone foundations, cost $5,000; Killian & Poor, builders. For S. H. Dillon, two-story dwelling, 42 by 36 feet, brick veneer, brick foundations, roof tin and shingles, cost $3,400; Frank Clark, builder. For Mr. Philo Graves, dwelling, 40 by 48 feet, high brick basement, and two-story frame, to cost $3,000; Payette & Babue, builders. For Otto Housewauld, a hotel, two-story frame, 32 by 50 feet, to cost $3,000; Killian & Poor, builders. The above are all under way. For Mr. G. H. Wright, double two-story frame building, 36 by 52 feet, to cost $3,000; projected.

Springfield, Mo.—Building operations are very quiet just now. Very few large buildings are contemplated for this season.

Architect W. E. Foley reports the following work, now under way: For G. C. Ruhle, at North Springfield, a two-story brick store, 21 by 60 feet, to cost $3,500; H. B. Grubbs, mason; J. Marble, carpenter. For S. G. Baldwin, at North Springfield, a two-story brick store, 21 by 60 feet, to cost $3,000; H. B. Gruhbs, mason; E. C. Bunker, carpenter. Also at North Springfield, St. Mary's R. C. Church, 36 by 70 feet, brick, with shingle roof, to cost $4,200; H. B. Grubbs, mason; Smith & Everett, carpenters. At Springfield, for H. E. Howel, a two-story frame residence, to cost $4,000; J. H. Huston, contractor. For Mr. C. Clements, a two-story frame residence, to cost $4,200. For the Society of the Immaculate Conception, a brick church, 47 by 90 feet, with slate roof and spire, to cost $15,000; Ward & Burns, contractors. At Pierce City, Mo., for Pierce City Baptist Society, a frame church, 35 by 75 feet, to cost $3,200; Z. Cox, contractor. For Mr. L. L. L. Allen, a two-story frame residence, to cost $3,000. For Joseph Newman, two-story brick store and office block, 50 by 100 feet, to cost $10,000; Jos. Kuntz, contractor.

St. Louis, Mo.—Architects James Stewart & Co.: For Mr. W. S. Scott, on Delmar avenue, a one-story four-room cottage, to cost $2,200. For Mr. D. Cahill, on Third street, a two-story six-room house, to cost $2,000; O'Malley Bros., contractors. For A. B. Meyer & Son, two-story building, to cost $8,000. For Caroline D. Gorsuch, corner of Twentieth and Wash streets, four two-story tenement buildings, to cost $6,500. For the Great Western Supply Company, a frame structure, 300 by 70 feet, to cost when completed $10,000, is now being built in East St. Louis. The plans and specifications for eight new tenement houses, to cost $17,000, are ready for Dr. McLean.

Architect Geo. W. Pipe: For Mrs. Donnelly, a two-story six-room house, to cost $2,500; Chas. Newberry, contractor. For Mr. C. Hein, a two-story six-room house, to cost $2,500. For Mrs. Mary Gerber, on Easton street, a two-story residence, eight rooms, to cost $5,000. For Mr. E. Taylor, on Twenty-first street, a two-story residence, six rooms, to cost $4,000.

Architect Jas. B. Legg: For Merrill Watson, two-story nine room house, to cost $7,000; S. H. Hoffman, contractor. For Mr. Jno. Mahon, on Gordon street, a two-story residence, eight rooms, Mansard roof.

Architect J. W. Herthel: For Mr. T. W. Dorst, two-story eight-room house, to cost $2,500; John G. Hendricks, contractor.

Architect J. H. McNamara: Addition to St. Michael's Church, on Clinton street, to cost $7,000; O'Malley Bros., contractor.

Architect T. W. Brady: For Dr. Case, on Lucas avenue, two-story seven-room house, to cost $2,200; G. E. Miller, contractor.

Architect Chas. F. May: For Jacob Schopp, on Broadway, a three-story building, to cost $4,900; Aug. Fick, contractor.

Architect W. G. Gains reports outlook favorable for this time of year. Most of the architects are busy. Mr. Gains has the following work under way: For J. B. Haggerty,

a three-story store building, 25 by 75 feet, brick and iron construction; to cost $10,000; J. H. Keef, builder. For Mrs. E. E. Walthers, a one-story "Queen Anne" cottage, 38 by 40 feet, to cost $3,300; Feller & Sons, builders. For Geo. H. Kahman, at Washington, Mo., a two-story "East Lake" cottage, 25 by 40 feet, to cost $4,500. For Theo. Rick, altering building and two-story brick addition, 45 by 20 feet, to cost $6,000; F. Laffhazen, builder. For M. Gannon, a double tenement house, 30 by 55 feet, to cost $4,500; J. H. Keef, builder. For Chas. Heim, two-story dwelling, 20 by 60 feet, cost $3,200. Also a number of buildings previously reported, now under way.

Architect E. C. Janssen: For Mrs. Schlegel, a two-story five-room residence on Hickory street, to cost $1,600. For the Lungstrass Dyeing Company, a three-story building, corner Linn street and Park avenue, cost $3,500.

Architects J. P. Lindsly & Son: For Mrs. L. E. Barnes, on Windsor Place, near Grand avenue, two-story ten-room residence, to cost $4,500.

Architect J. Mountain: For Mr. G. Erskine, repairing four-story building on corner of Eighth and Olive streets; cost, $5,000.

Architect O. P. Koenig: For Mr. Fred Moll, corner Chouteau and Jefferson avenues, two-story seven-room house, to cost $6,000; C. H. Poertner, contractor. For Augusta Bucholz, on La Salle street, two-story six-room building, to cost $3,500; Thos. J. Gunn, contractor.

Architect Chas. H. Peck: For himself, three two-story houses on Magazine street, to cost $5,500.

Architect G. C. Lewellin: For S. M. Walls, two two-story houses on Harket street, to cost $2,800; W. E. Walls, contractor.

Architect F. H. Torrence: For Mr. Henry Gehrke, two-story six-room house, to cost $3,000. For Mr. Robert Renecke, a two-story six-room house on Arsenal street, to cost $5,000; the architect is the contractor. For Mr. Jean T. Monroe, a two-story and mansard dwelling, twelve rooms, to cost $7,000; the architect is the contractor. For Mr. Frank Jurke, a two-story six-room house, to cost $3,000; the architect is the contractor.

Architects Paulus & Weidemueller: For Mr. Richard Meyer, on Eleventh street, a two-story six-room house, to cost $2,500. For Mr. Wm. Vogel, on Geyer avenue, a two-story six-room house, to cost $2,700. Also for Mr. F. Meyrose, a two-story six-room dwelling, to cost $3,600. The architects are also the contractors of the above.

Architect Adolph Wagner: For Hy. Grabenschwoir, two-story house on Perry street, to cost $2,300. The architect is the contractor.

Architect H. Maack: For Wm. Meyer, on High street, two-story six-room residence, to cost $2,100; L. Webber & Co., contractors.

Architect J. E. Johnston: For Mr. Jos. Murphy, a block of three two-story houses, on Cass avenue, to cost $6,000. Also three three-story houses on Cass avenue to cost $3,000; Goesse & Remers, contractors.

Architects A. Grable & Co.: For St. John E. South, a one-story building, to cost $5,500; John C. Schubert, contractor. For Aug. Eichele, on Carroll street, a two-story eight-room residence, to cost $4,700; H. Uhri, contractor. For Louis Bernheimer, a two-story eight-room dwelling, to cost $8,670; Goesse & Remers, contractors.

Architect T. B. Arman: For Equitable Trust Co., alterations on their building on Third street, to cost $13,000; Frank S. Green, contractor.

Architect E. Mortimer: For Mrs. M. S. Switzler, a two-story twelve-room dwelling, to cost $3,500; J. H. Dunlap, contractor.

Architect Isaac S. Taylor has drawn the plans and is superintending the reconstruction of Gregory's old Winter Garden on Fourth street, near Walnut, to cost $10,000. For Mrs. Wm. Lucas, on Pine street, two two-story houses, eight rooms each, to cost $7,000; J. J. McMahon, contractor. Mr. Taylor also has on his boards the plans for three tenement houses, valued at $8,000, to be erected on Grand avenue, near the Water Tower, for Robert Green.

Architect P. Meagher: For Mr. John Tabor, on Ohio avenue, a two-story building with ten rooms, to cost $4,500; Chas. Gerhart, contractor.

Architect T. J. Furlong: For Children's Hospital of St. Louis, a two-story building, sixteen rooms, to cost $16,000; Rude & Luke, contractors.

Architect Geo. B. Field: For Hattie F. Clay, on Scott avenue, five three-story six-room houses, to cost $15,000.

Architect F. E. Lee: For the Rosier estate, a five-story building, five rooms, to cost $6,000; B. Webber & Co., contractors.

T. Gugerty, contractor and architect, is building for Mr. N. Steber, a two-story dwelling with mansard roof, to cost $6,500.

Architect J. Goesse: For Mr. J. Kennard, on east side Nineteenth street, near Cass avenue, two-story sixteen-room building, to cost $5,500; Bode & Bademan, contractors.

Architect J. Stander: For Mrs. Meah, two two-story buildings, to cost $5,000; for Theresia Harttle, on Geyer avenue, two-story building, mansard roof, seven rooms; cost $3,800. The architect is the contractor for both the above.

Architect McCallom: For W. M. Klasing, two two-story houses on Grand avenue, cost $4,000; Wm. Palmer, contractor.

Architects O'Malley Bros.: For Mr. John Bambrick, on Manchester road, three two-story houses, cost $4,000. The architects are the contractors.

Architect Jno. Costello: For Wm. Garry, on Montgomery street, two-story six-room dwelling, to cost $3,000. The architect is the contractor.

Architect G. B. Fitzgibbon: For Mr. Wesley Brown, a block of four houses on Thirteenth street, to cost $5,500. The architect is the contractor.

Architect J. E. Truitt: For Mr. John Wortsmith, two-story building, to cost $2,500. The architect is the contractor.

Architect E. Thomssen: For P. Seibel, one-story cottage, with mansard roof, four rooms; cost $2,000.

Contractors Hermann & Schumacher: For S. St. Louis Gymnastic Society, two-story six-room building, corner Tenth and Carroll streets, to cost $7,000.

Contractor John Adams: For himself, on St. Charles street, near Jefferson street, two two-story dwellings, to cost $2,700.

Contractor Fred Voelpel: For Jno. Voelpel, on Tenth street, two two-story dwellings, with Mansard roof, to cost $3,400.

Contractors Goesse & Remers: For Mr. Jno. Foley, two two-story twelve-room houses, to cost $2,170.

Contractor Fred Kniette: For Charles Kronenbold, on Keokuk street, two-story dwelling, to cost $2,400.

St. Paul, Minn.—Mr. Geiselman, lately of Wilkesbarre, Pa., has broken ground on Seventh, between Cedar and Minnesota, for his new four-story brick block, 50 by 100 feet in size.

Following are some of the more important building permits recently issued: V. C. Gilman, two-story frame dwelling on north side of Ashland, between Mackubin and Kent, to cost $3,500. Emmet Lytle, three-story brick tenement block on east side of Cedar, between Tenth and Eleventh streets, to cost $30,000. E. V. N. Abbott, two-story frame dwelling, 35 by 47 feet, on the north side of Ashland avenue, between Arundel and Mackubin streets, to cost $5,000. William Morris Carson, two-story frame dwelling, 30 by 40 feet, on the south side of Holly avenue, between Arundel and Mackubin streets, to cost $3,500, E. A. Hendrickson, two-story frame dwelling 36 by 44 feet, on the south side of Selby avenue, between Nina and Farmington avenues, to cost $2,644. C. G. Kolif, two-story frame dwelling, 30 by 34 feet, on the south side of Laurel avenue, between Arundel and Mackubin streets, to cost $3,200. A. T. Upham, two-story frame dwelling, 20 by 30 feet, on the west side of Cooper street, between Spruce and Tenth streets, to cost $2,200. E. V. N. Abbott, two-story frame dwelling, north side Ashland avenue, between Arundel and Mackubin streets, Woodland Park addition, to cost $5,000. H. C. Davis, two-story frame dwelling, 36 by 54 feet, on the east side of Wilkin street, between Elm street and the railway, to cost $2,500. W. P. Jewett, two-story addition and alteration to dwelling, 51 by 50 feet, on the east side of Temperance street, between Eighth and Ninth streets, to cost $6,000. Gordon E. Cole, three-story brick store, 26 by 110 feet, on the east side of Jackson street, between Fifth and Sixth streets, to cost $8,645.

Within two blocks of each other two widely different but exceptionally handsome buidings are being erected; the National German American bank, corner Fourth and Robert, and the United States quartermaster and commissary depot, corner Second and Robert. The government depot has reached the brickwork of the second story, and the massive stone walls of the first story show how thoroughly strong the structure will be. As yet the scaffolding and surrounding debris hide the beauties of the bank, but it will be by odds the handsomest building in St. Paul when finished. The Superior sandstone contrasts to great advantage with the deep-colored brick, and will lose none of its beauty by exposure or age. Charles Horst has broken ground for his three-story brick block, 50 by 100 feet, on Tenth, west of St. Peter.

Sturgis, Mich.—Architect J. S. Wallace reports that very little is being done, and that nothing new is projected. He has the following under way, which will probably close the season's work. For J. W. Flanders, four brick stories, 100 by 75, two and three stories high, with tin roof, to cost about $15,000. For A. P. Rilley, a brick dwelling, to cost $1,700. For P. W. Bersidge, a frame dwelling, to cost $800.

Architect J. M. Barrows reports Town Hall and engine house, brick, two stories high, to cost $3,000. For Milo Clark, an opera house, 40 by 80 feet built of brick, cost $5,000. For Willis A. Clugston, block of stores, at La Grange, Ind., containing six stores, 20 by 75 feet each, built of brick, cost $7,000; under way. For the Lutheran Society at Logan, Ind., brick church, 32 by 44 feet, to cost $2,000. St. Mark's Church, at Lima, Ind., built of brick 30 by 60 feet, to cost $4,600. A Masonic hall, 60 by 75 feet, to cost $3,600. Masonic block, containing four stores, built of brick, to cost $10,000. Also several small houses, to cost from $1,000 to $2,000 each.

Tiffin, O.—The corner-stone of the new courthouse, now building in Seneca county, was laid June 23, with imposing ceremonies conducted by the Masonic Grand Lodge of the State. General W. H. Gibson was the orator of the day. The corner-stone contained a brief statement of the organization and membership of each of the churches and societies of the city, and a copy of each of the newspapers published in the county. The temple of justice is to cost about $200,000. It will be a pride to the citizens of the county.

Topeka, Kan.—Reports indicate that there is alarge amount of building being done in all parts of this state. Architects Haskell & Wood report the following: For Mr. J. W. White, at Lyons, Kan, a hotel, to cost $22,000. For Mr. A. J. Kane, at Meriden, Kan., a residence, to cost $5,500. At Valley Falls, Kan., a schoolhouse, to cost $18,000. At Halstead, Kan., a church, to cost $14,000. At the Wichita Agency, Indian Territory, a schoolhouse, to cost $18,000. Also have contracts for heating of Indian school building at Lawrence, Kan., to cost $11,700, and heating hospital building at Topeka, to cost $3,500.

Waukesha, Wis.—The summer season is given up to pleasure in this place, as it is a summer resort. Outlook for fall is very favorable.

Architect Samuel Drew reports: For Mr. W. H. Thomas, a three-story frame hotel, 60 by 60 feet, to cost $10,000; contract not let. For Mr. Morgan Jones, a two-story frame residence, 32 by 62 feet, to cost $6,000; under way; Johnson & Bray, builders. For Mr. Dexter Bullard, a three-story hotel building, 32 by 88 feet, to be known as the "Arlington House," to cost $12,000; nearly completed. For W. H. Marsh, a two-story frame hotel, to be known as the "Marsh House," 44 by 98 feet, to cost about $7,000. For Wm. Hepp, a two-story frame residence, 30 by 40 feet, to cost $2,000; John Deck, builder. For R. W. Johnson, a two-story frame residence, to cost $1,500. For August Dieman, a three-story brick hotel ("Fox River House"), 52 by 100 feet, to cost $15,000; contemplated contracts not let. For Hadfield & Co., six one-and-a-half story cottages, 16 by 28 feet, to cost $500 each; under way. For Mr. McCliech, a two-story frame dwelling, 26 by 40 feet, to cost $2,500; nearly completed.

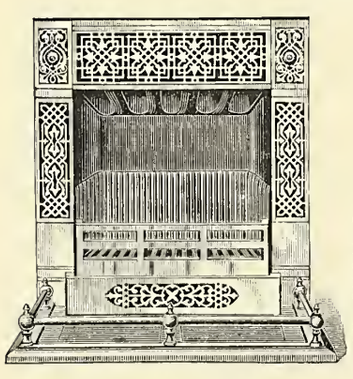
York, Neb.—Architect N. A. Sherman reports that considerable has been done this season; quite dull at present and future business depends on crops. The buildings following are now under way: For Mr. A. B. Codding, a two-story brick veneer residence, 28 by 42 feet, to cost $2,600. For D. N. Blood, a two-story frame house, 32 by 52 feet, to cost $3,500; I. Stepleton, builder. For J. C. Kingsley, a two-story frame house, 32 by 52 feet, to cost $2,700; Thos. Bell, builder. For C. L. Meissner, a one-story cottage, 41 by 30 feet, to cost $1,300.

Architect Wm. A. Bell: For Wright & Armstrong, the York National Bank building, 120 by 100 feet, four stories and basement, brick, with stone trimmings, plate glass front, to cost $25,000; walls up one story; J. N. Shoemaker, mason; J. M. Bell, carpenter. For F. O. Bell, a three-story French roof villa, 52 58 by feet, brick veneer, stone trimmings, to cost $7,500: plans completed. Also an Italian villa, 40 by 60 feet, brick veneer, galvanized iron trimmings, to be built this season, and several smaller buildings, costing from $1,500 to $2,500.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating GRATE.



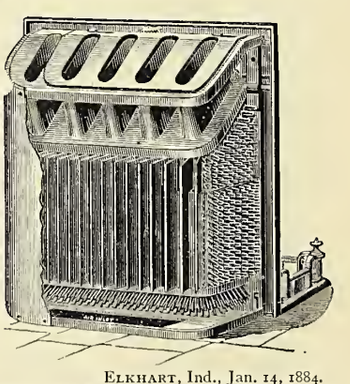
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

THE INLAND ARCHITECT AND BUILDER.

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AUGUST, 1884.

THE

INLAND ARCHITECT AND BUILDER

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ARCHITECTURE,

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THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on page xiv.

ALBANY, New York, is selected as the place of holding the annual meeting of the American Institute of Architects for 1884. The date set is October 22, and in the State of New York this is one of the loveliest months of the year. The desire of a majority of the members being expressed in favor of that city, that they might enjoy an opportunity of studying some of the remarkable buildings now in process of erection there, the trustees have made arrangements by which the convention may meet there conveniently. To the Eastern members of the profession this occasion will be looked forward to with considerable anticipation; but to those of the West, past experience leads us to fear that a good intention will be the limit of their attendance. This is not as it should be. The trustees of the institute impartially follow the popular voice, and the meetings are only held east because the majority of the members wish it. The excuse offered by some, that "it is too far," is not in all cases valid, for when, two years ago, the convention was held at Cincinnati, on purpose to interest and accommodate Western architects, it was somewhat discouraging to observe no architects from St. Louis and but one from Chicago in attendance. For the past three years the "West," which may in this case designate all the cities west of Cleveland, Ohio, has been represented at these conventions by but one architect. The architects who are too busy, or for other reasons do not go, are not aware of the benefits they would derive or the pleasure they miss by their continued absence from these conferences of the profession. We earnestly hope to see a full attendance of architects from every Western city at this convention this fall, and believe that not only will they be greatly benefited, but their future work improve by that exchange of ideas which forms one of the valuable features of these meetings. Though the details of the meeting are not yet arranged, and will in the future be announced, notice is given that ample time may be given to architects for preparation.

THE demand for a convention of Western architects is imperative, judging from letters received from prominent members of the profession throughout the West; and in response to this we would announce a call for a meeting of all architects, particularly those of the South and West, to convene at Chicago on the second Wednesday in November next. An opportune letter from Architect Henry Lord Gay, published in this issue, opens the way for a large convention to meet and discuss those matters upon which the future usefulness and advancement of the profession depends without cost to the architects; and we sincerely hope that not only will the architects be unanimous in their attendance, but that the intervening time will be devoted to the forming of projects that have for their object the good of the profession. It is also important that local associations attend as associations, and in their meetings during the intervening time discuss the question of the advisability of establishing a Western association as a central body to which all may bear intimate relations, both as individual members and as associations. We would also suggest that architects forward to us expressions upon such points as they think should be discussed in this convention.

THIS movement is called forth, in a large degree, by the small attendance of Western architects upon the annual meetings of the American Institute; and though for the past few years Western members of that body have been requested to exert themselves in the work of increasing the attendance upon meetings of the local chapters, the membership has not enlarged in a degree corresponding with the increase of the profession in the West, while the rolls of the Institute show that a large majority of names of Western members of former years have lapsed. The Chicago convention is intended to in no way interfere with the existing institution, but to aid it in the work it has so long and creditably performed. It is therefore apparent to the majority of the profession that the time has come when the architects of the United States should be more united in their action, and this can only be accomplished by the meeting of those who have the future architecture of the country in their charge. The rapid strides the West is taking in every direction shows the imperative necessity of architects keeping pace with it in their endeavor to leave behind them those monuments that endure and to which the citizens of the future may point with pride and look to as the foundation of American architecture.

THAT a new era has begun in the history of American architecture is evidenced by the many measures of reform that are discussed, both by the associations and by the architects generally. That of competitions is one of the more important. The American Institute of Architects have addressed a concise and comprehensive circular to the profession generally, calling for their views upon the subject, and combination against the "no cure no pay" system that has almost irreparably ruined our public architecture; and now the Architectural Association of Des Moines, Iowa, have taken the matter in hand with the prospect of a full support from all the architects and associations in the West. The architects certainly have this matter in their own hands, and by united action can not only benefit themselves but raise the standard of the profession to an elevation it is in some respects sadly in need of. It is a healthy sign when such men as compose not only the associations referred to, but others

throughout the country, are alive to the needs of the profession, and so intelligently discuss and endeavor to work out this much-needed reform.

ANOTHER of these movements is the tendency among our profession in almost every city toward association. The proposed convention of Western architects is a movement that is not only gaining the written commendation of architects throughout the South and West, but the action of local societies point to it as the means by which the profession may be brought to act in unison. It has been suggested by one association that the institute systems of England and America have been failures. But, while their success in drawing architects together in local association may have been limited, and there may be a better way to accomplish this, the American Institute has effected, and thoroughly too, all the reforms, and given to the profession in America all the standing that it has enjoyed. It is the "bedrock" upon which will stand all the prosperity and advancement that we may in the future reach, and to which those must go down who in the future search for the foundation of those ethics that regulate the art of building in America, even though they may be lost to sight and covered by the imposing structure of organization effected by those that are now succeeding it. It is fortunate for our profession in this new world that the traditions of the art are so broadly and plainly written, and so easily interpreted that he who runs may read, and if he will honestly study the past, the future can have nothing for him but what is highest and best in architecture.

THAT philanthropic enterprise, the Chicago Manual Training School, the funds of which were contributed by the Commercial Club of Chicago, was opened in February last for the reception of pupils, and closed its first half-year in June, with an enrollment of seventy-two. Its success has been very gratifying to its friends. The interest taken in the school by the public has been greater than was expected, although it was well known that the progress of the undertaking was closely watched by many who have the cause of education at heart. Hundreds have visited the school, have studied its plan, and have been impressed with the idea that the school is admirably adapted to the needs of the time. The enthusiasm of the pupils has been noted by even the most casual observer; the work of their hands, which, for the past term, has been wholly in wood, would do no discredit to a trained mechanic. The boys who have been engaged in woodworking the past year will, in September, enter the forge-shop, and in September, 1885, the machine-shop. This school is not a trade-school, in which trades are taught. In this respect, it is wholly unlike the New York trade schools, in which young men are instructed in plumbing, plastering, etc. In the Chicago school, the use of tools is taught for the sake of the manual and mental training which is to be obtained therefrom, as well as for the skill which may be acquired for future use. It is believed that a boy's hands are an essential part of the boy, no less than his head; that his hands ought to be trained no less than his brains; that the boy whose mind only is educated, is only partially educated. Several important things result from this style of education. The boy so trained is better acquainted with the world in which he lives than the boy who has had no such training. He is better informed concerning the character of the men who compose the vast majority of mankind. He has learned not to despise a laboring man because he is a laborer. He appreciates the skilled mechanic as a man of brains, as well as the writer or the speaker; that he may be much more a man than a mere clerk, whether by "clerk" is meant a keeper of books or a salesman. He has also developed self-reliance, since he has learned something of his own ability to work. And while he has mastered no particular trade, he has laid the foundation for several, being able, with a few months' practice, to take his place as a skilled mechanic.

BUT the Manual Training School does more than simply put a boy in the way of earning a living (though this of itself ought to be sufficient to commend it to all); it gives a boy the essentials of what is usually known as a high-school education. Whatever culture can be had from algebra, geometry, literature, physics, chemistry, Latin, if he desires it, the Manual Training School gives him. The advantages thus offered are recognized by our best citizens. The school is not, as might be supposed from its name, a reform school for vagrants. Of the seventy-four boys in attendance the past term, the catalogue shows that twenty-three were sons of merchants. twenty-two sons of manufacturers and mechanics, five sons of physicians, etc. The catalogue also states that twenty-six boys entered the school from the city and other high schools. If any one of our readers is in doubt as to the social standing of the patrons of the school, let him send to Director Belfield for a catalogue, and examine the list of pupils. On the other hand, the school is not for the sons of the well-to-do only, nor simply for the children of those in moderate circumstances. Read the following sentences from the catalogue:

"The founders of the school desire that its advantages may be enjoyed by all who desire them, especially by boys who, by reason of age, scholarship, mechanical aptitude, and good moral character, are fitted to enter the school, but whose lack of means prevents. The parents of such boys are invited to consult with the director, since provision has already been made for the payment of the tuition of a few worthy boys, and it is hoped that many permanent scholarships may be endowed for this purpose."

The citizens of Chicago have reason to congratulate themselves on the establishment of this school in their midst. Its permanent success is assured by the men who have it in charge. Its doors are open to worthy youth. It is manned with excellent instructors. It is equipped with the best and most modern appliances for the prosecution of its work. It must be, it will be, worthy of the city of Chicago, and of the great Northwest.

SMOKE, its evil effects, and prevention or disposal, is at present a much agitated question on both sides of the Atlantic. In England, besides the acts bearing upon the question in regard to factories, etc., an act has lately been placed before Parliament to include private houses. Of this the *Builders' Weekly Reporter*, of London, says:

An important step in the matter of legislation has been made during the past few days. On the 26th of June, a Bill moved in the House of Lords by Lord Stratheden and Campbell to amend the law for suppressing smoke in London, passed its first reading. The Bill is not yet printed, but we may inform our readers that its main object is to extend the provisions of the Smoke Abatement Acts, which apply to the Metropolis, to the chimneys of private houses, and to include *all* trades and furnaces which are at present outside the reach of those Acts, although not specifically exempt. The proposed measure is, no doubt, one which may seem at first sight too sweeping for public acceptance at present. At the same time, we have reason to believe that the Bill will receive influential support, including that of some of the largest owners of metropolitan house property.

As was stated by the mover of this bill the increase of smoky chimneys in London is about 75,000 annually. This amendment to the area and scope of previous acts appears to be merely a necessary adjustment of detail to meet the extended area of the metropolis, and to include the new trades which have sprung up recently. In the cities of the United States, and we take Chicago as that in which a rigidly enforced smoke ordinance to be most necessary, the question is yet only agitated in regard to industrial establishments, of which there are about 3,479 in Chicago, steam locomotives, tugboats, etc., all of which, as a rule, burn soft coal. Smoke has been declared a nuisance, and the Supreme Court has confirmed the decision, but a vacillating municipal policy has until of late made little progress toward its abatement; and now while the city authorities pretend to be active, dense

volumes of smoke meet the eye everywhere, from mills, factories, tugboats and locomotives, and the fabrics in our stores are injured to the amount of thousands of dollars each year, the façades of our fairest architectural creations are completely blackened, and the health and comfort of the citizen and visitor are injured by that useless, aggravating and unnecessary destroyer of health, happiness and beauty called the "smoke nuisance." We do not know what means our English neighbors have for its prevention; but in this land of enterprise and invention there is no lack of practical consumers and methods of using fuel that not only will have the desired effect, but add to the profits of the user as an economic measure.

M. H. COBB, in the *Journal of Progress*, has prepared a valuable article and table showing the relative wages paid in England and America in all lines of labor, and the relative cost of bread staples. The figures, which are compiled from the best official information obtainable, show a surprising difference in the price of labor, while the cost of breadstuffs and living is almost parallel. We give the comparative table of the wages paid to the building trade in 1883.

	England. Weekly Wages.	United States. Weekly Wages.
Carpenters and joiners	$8 83	$13 78
" ordinary	5 52	
Bricklayers (master)	9 38	18 40
" ordinary	6 08	
Masons (best)	7 94	18 40
" ordinary	4 96	
Plasterers (best)	8 83	16 32
" ordinary	5 53	

The statistics for the United States represent the average wages paid in the Middle States, but as the general average is larger no fault can be found with this.

While these figures are significant, they need to be supplemented by those representing the relative cost of breadstuffs, to show how far in advance of that of the English workman is the position of the American, and how little the free-trade policy of the English government helps as it must affect the condition of her people. The principal staples range about as follows:

	England. Cents.	United States. Cents.
Flour per lb.	04	04
Beef, good	20	16
Mutton, good	22	16
Pork, "	18	16
Ham, "	22	17
Bacon, "	15	16
Codfish, "	08	08
Cheese, "	18	20
Eggs per doz.	30	25
Potatoes per bush	60	$1 00
Milk per quart	08	08
Lard per lb.	16	16
Butter, good	30	35
Tea, "	80	50
Coffee, "	40	28
Sugar, "	07	08
Rice, "	08	10
Rents (4 rooms)	$55 00	City $ 96 00
" 6 "	80 00	City 144 00
Borough rates per year	4 85	

The rents seem cheaper in England, but at their lowest will not make up for the vast difference in wages; and when we consider that the rents in our small manufacturing towns are far below the figures given, and the houses are invariably superior to those occupied by the workman of England, and also the fact that few of our workmen will consent to live, eat and sleep in the same room, but are fortunately able, from the rate of wages paid, to do better, the arguments of the disciple of Cobden seem those of an earnest but sentimental enthusiast. The fact needs little argument other than careful scanning of the above figures, representing income and expenditure, to show the average man that if free trade can do nothing for an island the size of the State of Illinois, crowded with population and constantly requiring breadstuffs and manufactures from abroad; how can it benefit a great country with every resource for production and consumption within her sea-swept borders?

SOME of the evil effects of convict labor are being felt in Minneapolis, as they are in every locality where the competition upon cut-stone contracts brings this class of labor in competition with regular tradesmen. It being understood that the stone for several of the largest structures at this great building point is being prepared at Joliet, Illinois, and that the same contracting firm for prison labor is now bidding for other important work, the Trades and Labor Assembly met, and in mass meeting demanded that they should not be placed in competition with prison labor. So long as there is a demand for this class of labor contractors will furnish it, but the states should make laws to protect the industries that need skilled labor for their promotion and place their convicts in some other attitude than legitimate competitors for honest labor. In the line of stone-cutting the custom probably grew out of the stone-breaking for macadamized roads, etc., by convicts, and, as in other lines, the convict has been educated into the field of skilled labor. This may be a good idea, but it seems to us to be all for the convict and very little for the honest man. The state could very easily devise means for keeping convicts busy, and even for making them profitable, without interfering with many of our best and most important industries. It also lies with architects and owners to distinguish between the honest man and the convict, and see that the preference rightly belongs to the honest workman, and not the state's ward.

CHICAGO has been criticised, and that in no less a representative paper than the *Philadelphia Record*, and of no less a representative city than Philadelphia, and, worst of all, the criticism becomes a comparison between Chicago architecture and enterprise and that of Philadelphia. From half a column of correspondence devoted to the belittling of all that makes Chicago the first city upon the continent in all that marks enterprise, growth and metropolitanism, we glean the following brief extracts, which we notice and print that a few true statements may be made, rather than to push into undue prominence that which otherwise would probably remain unnoticed by any but Philadelphians who have never traveled, and disbelieved by those who have. Notice the following:

* * * Chicago is just the sort of town you would expect to find in such a country. It is big. It has some big buildings. It has, or soon will have, a big board of trade building and a big city hall. It has already two of the biggest hotels east of the Rockies, and rows upon rows of big bank and insurance buildings. * * * There is a big natural lake in front of the town, and a big natural prairie behind it. I think this sums up its principal attractions. It is just like every other western town—a big overgrown boy. It is not nearly as big as its plan, yet it is much bigger than its actual growth. Its architecture is very varied. None of it is beautiful except a few houses—two or three—on Michigan avenue, which, as a residence street, does not begin to compare with the residence streets of other western towns,—to say nothing of those in the East. Its streets are in a terrible condition—a mass of badly-laid wooden blocks, full of ruts and holes. The sidewalks on Wabash avenue and on other streets of equal importance are made of planks. * * * The Exposition building, in which the convention was held, is a dingy disgrace to the town. The park and boulevard system has still the ragged edge of incompleteness. * * * Then the people—those wonderful people whose city water-works are over the fountain of some perpetual youth! Why they're just the same sort of people you will find anywhere. They look tired, though, as if their effort to keep their boom abreast of their brag had exhausted their energies. I saw no electrical energy—no particular energy of any sort. The people do not begin to be as energetic as the people of Philadelphia. Everything moves slowly and a trifle wearily. As I said, it is a big town—a big, overgrown, pork-packing town, with a noisy board of trade attachment. * * *

The writer concedes us some "big" buildings, big hotels and big insurance buildings, but would it not have been as well, and a deal more truthful, if he had said the City of Brotherly Love has within its borders no office buildings such as those recently erected in Chicago, and of which the Pullman building is a representative; no insurance buildings such as the "Royal" or the "Home," or such hotels as the Palmer and other hostelries, which enjoy a reputation for size, facility and comfort that is national, and last, no bank buildings such as the First National or Commercial National banks, that are models for the financial world? Philadelphia has one of the finest depots on the continent, and Chicago is about to acquire its equal, and it will be made of Philadelphia brick, because

there are some men of enterprise even in Philadelphia, and they are welcomed and treated with cordiality and fairness when they come to Chicago, their enterprise being their passport.

In regard to its architecture, the writer concedes a few residences of merit to Michigan avenue, when not only that street, but the broad avenues, Prairie, Wabash, Forest, Indiana, Calumet, with all their intersecting streets, and others not mentioned, on the south side; the whole section east of State to Lincoln Park, on the north; the streets, excepting Madison, which is a business street, from Fulton street and Washington boulevard to Van Buren street, on the west side;—all grand and picturesque, with their many shaded drives and a display of architecture that at least the city of Philadelphia cannot show the first idea of. In that city they use green stone, and the houses are, as a rule, ugly. In Chicago, a residence that is acknowledged by one of the best of New York architects to be beyond criticism is made of this (really beautiful when properly used) material, but we do not use it in combination with glaring white marble. In regard to the condition of the streets, the writer should have been silent, for he had forgotten the stone cobbles of Philadelphia upon the approach of the early milk or baker's wagon as he vainly tries to take his morning nap. The streets in the center of the city are laid with square blocks of granite, those in the residence portion generally of cedar blocks, but in good condition, and as level as a floor, and the boulevards, of which there is rather more than less than fifty miles, are macadamized. A few short streets in the outskirts may be out of repair, but nowhere are there "ruts and holes" such as we have seen in Philadelphia in business sections; and the sidewalks are, as a rule, of flat flags of limestone, and there are absolutely none of red bricks with grass growing in the interstices. Chicago is almost surrounded with parks that, although not improved to their allotted boundaries, are equal in artistic arrangement and in natural growth to those of which Philadelphia may well be proud, but which leads to the thought what might Fairmount not be if it belonged to Chicago and had such a board of park commissioners to improve it. If Chicago is the best watered city on the continent, it is due to the Chicago enterprise that built a tunnel for three miles under the lake to secure it. And in general, to speak of Chicago people as being without energy renders the writer of such a libel ridiculous even to Philadelphians. The people of that city, above all others, are conservative and their financial credit is above all question; but when, as is commonly said there, the fire-engines go slow "because a man was killed once," and the merchant is more inclined to sit in his counting-room and wait for the world of trade to come to him, the method of procedure is certainly safe, it is cautious, but it is a cautiousness that would have left Chicago a howling wilderness upon the shore of an unknown lake, instead of being what her energy and enterprise have made her,—a wonder of growth, prosperity and substantial power.

Improvements of the Roman Campagna.

The sanitary amelioration of the Campagna was determined upon and decreed by a law passed December 11, 1878. It was ordered, as a work of public utility, that the marshes and ponds existing in the Campagna should be drained, and, in addition, the collecting of the springs and the regulating of the soil by means of a complete canal system of all the waters, comprising the underground waters. By virtue of a law recently passed, the work is to commence by improving, agriculturally, a zone of ground within a radius of about six miles from the center of Rome. The total area of the Agro Romano is 525,316 acres; that included in the circle of six English miles is about the seventh part of this surface, or 77,647 acres, which are subdivided thus:—Town, 3,546 acres; rivers, 1,043; vineyards, gardens, parks, or villas, and intermingled roads and streams, 18,611. The remaining 54,447 acres are now used for pasture, wood, and quadrennial sowing, and to that surface is specially applied the agricultural amelioration which becomes obligatory on all the landowners. The Italian government desire to attain their object without infringing on the rights of property, and they express their intention of leaving to proprietors a certain liberty in the choice of the works to be executed, and of the cultivation best adapted to the soil. The proprietors are invited to present a report in which should be indicated the agricultural improvements which they intend carrying out on their own account, and which should specify the quality and extent of the proposed cultivation of trees, plants and herbs, and the roads and buildings for workmen and horses. A special agricultural commission will examine and modify these propositions, and will decide for those proprietors who have made no proposals which are the best improvements to adopt, and the estimated time and expense. In case the improvements are not effected, the government will have the right of expropriating and at once occupying the land, with indemnity according to the general law on expropriation, and will have power to let the land on lease or to alienate it; and the obligation to execute the improvements will, in this case, devolve upon the tenant or purchaser, under pain of the devolution of the land. Those who construct any buildings in any part of the Campagna within or beyond the zone formed by the circle of six English miles will enjoy exemption from taxation for ten years, and the increase of income, which will be obtained by the agricultural improvements of the land comprised in the zone, will be exempt from land tax for twenty years; and equal exemption will be conceded to the proprietors of the Campagna anywhere beyond the zone, if they execute, at their own expense, the agricultural improvements. Vice-Consul Franz says that "the future will show if these means are sufficient to execute the enterprise, which, in the opinion of the government, has become a national obligation, to endeavor to deliver the capital from the tyranny which the malaria and the deserted country exert round Rome, and in changing the Agro Romano into a fertile and flourishing region."

The Baths of Cleopatra.

BY THÉOPHILE GAUTIER.

The baths of Cleopatra were built in the midst of immense gardens filled with mimosas, aloes, carob-trees, citron-trees and Persian apple trees, whose luxuriant freshness afforded a delicious contrast to the arid appearance of the neighboring vegetation. There, too, vast terraces uplifted masses of verdant foliage, and enabled flowers to climb almost to the very sky upon gigantic stairways of rose-colored granite; vases of pentiletic marble bloomed at the end of each step like huge lily flowers; and the plants they contained seemed only their pistils; chimeras caressed into form by the chisels of the most skillful Greek sculptors, and less stern of aspect than the Egyptian sphinxes, with their grim mien and moody attitudes, softly extended their limbs upon the flower-strewn turf, like shapely white leverettes upon a drawing-room carpet. These were charming feminine figures, with finely chiseled nostrils, smooth brows, small mouths, delicately dimpled arms, breasts fair-rounded and daintily formed; wearing ear-rings, necklaces, and all the trinkets suggested by adorable caprice, whose bodies terminated in bifurcated fishes' tails, like the women described by Horace, or extended into birds' wings, or rounded into lions' haunches, or blended into volutes of foliage, according to the fancies of the artist, or in conformity to the architectural position chosen. A double row of these delightful monsters lined the alley which led from the palace to the bathing-halls.

At the end of this alley was a huge fountain basin, approached by four porphyry stairways; through the transparent depths of the diamond-clear water the steps could be seen descending to the bottom of the basin, which was strewn with gold-dust in lieu of sand. Here figures of women, terminated in pedestals like caryatides, spurted from their breasts slender jets of perfumed water, which fell into the basins in silvery dew, pitting the clear watery mirror with wrinkle-creating drops. In addition to this task these caryatides had likewise that of supporting upon their heads an entablature decorated with Nereids and Tritons in bas-relief, and furnished with rings of bronze to which the silken cords of a velarium might be attached. From the portico was visible an extending expanse of freshly humid, bluish-green verdure and cool shade,—a fragment of the Cale of Tempe transported to Egypt. The famous gardens of Semiramis would not have borne comparison with these. We will not pause to describe the seven or eight other halls of various temperature, with their hot and cold vapors, perfume boxes, cosmetics, oils, pumice-stone, gloves of woven horsehair and all the refinement of the antique balneatory art brought to the highest pitch of voluptuous perfection.

HOUSE FOR A.H. NORDYKE, ESQ.
INDIANAPOLIS, IND.

HODGSON, WALLINGFORD & SKEEN, ARCHTS.
INDIANAPOLIS, IND.

The Construction of Fireplaces and Chimney Flues.

BY FRANCIS LE BARON.

THIS is a very important branch of house-architecture for the safety of the house, and the comfort of the household depends upon it. Many architects neglect it, overlook it, or know nothing about it, and so houses burn down, and smoky chimneys make scolding wives, according to the old proverb. The chimney-stack was once the most important part of the building; in fact, the house was only a shed built round the magnificent tower of the chimney-stack. It used to be said that a yoke of oxen could be driven up an old-fashioned chimney, and stepping into the vast fireplace one could look up the long funnel, like the shaft of a coal-mine, and see the stars at midday. For many years the chimney flue has been growing

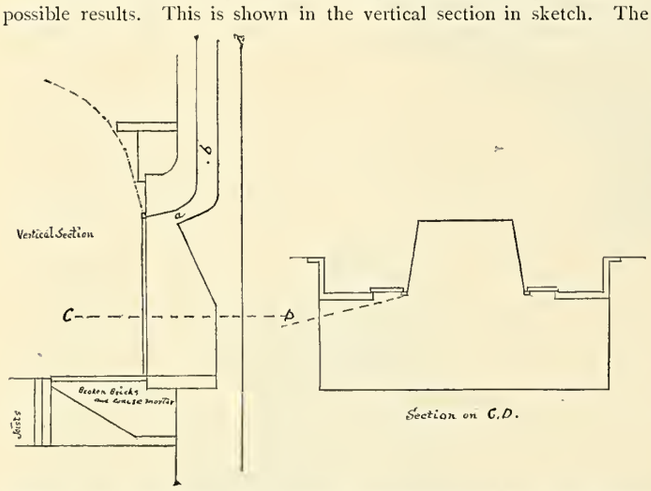
"Small by degrees and beautifully less,"

and now a chimney swallow finds himself very much cramped in his family arrangements, and even this small hole is often filled with brick and mortar thrown down by careless workmen while constructing the chimney above. And first, as to the construction of the hearth, we give the experience of Messrs. Bonner & Lancaster, whose years of faithful work have made them very wise in this direction. Where stone or brick arches are turned from the wall to the trimmer joists under the fireplace no danger from fire need be feared, and when these arches are thoroughly built trouble seldom occurs. It is in filling rooms with fireplaces as an afterthought, and on floors not provided with brick arches, that fires are to be guarded against.

There should always be a space of *at least nine inches* between the underside of the hearth and any woodwork, from the back of the fireplace to the front of the grate. No better substance than broken brick and coarse mortar can be used for filling in the space under the hearth. If the floor joists are too narrow to permit of this nine-inch space, then the hearth must be raised above the floor, or the ceiling of the room below must be boxed to the required dimensions.

Porous brick and hollow tile are good *if nine inches of space be filled in with them*, but they are no better than broken brick and coarse mortar, though they be called "*fireproof*." It will not be safe to depend on spaces of confined air to resist the penetration of heat where it is continuous, as under a fire-grate. Any porous, incombustible substance is better than a solid one, but it takes *nine inches* of it to make a fireplace safe. "During thirty years of constructive work in this line," says Mr. Lancaster, "I have never had an accident where this rule was observed."

There is but one way to build a fireplace which will give the best possible results. This is shown in the vertical section in sketch. The



aperture "a" should be no greater in area than the smallest place in the chimney. There should be a brisk suction through "a" continuously after the fire is lighted, and the ascending column of heated air in the chimney may be depended on to produce it, if it has *any sort of chance to do so.*

It takes great effort and ingenuity to construct a *bad chimney*, but it can be done by persistent trying, and some few architects may be depended on to do it every time. They obtain their results by providing for everything about the building but the smoke-flues, and then follow the zigzag of a lightning flash to get them through the roof. Chimney swallows are often found dead in the fireplaces below, dazed and killed by these crooked chimney flues. Sometimes the owner of one of these crookednesses runs with streaming eyes to the architect and shrieks, "My chimney smokes!" and is advised to pile on top of it a terra-cotta chimneypot, or finial with a very small area of flue, and the dire result is, that family and architect fall tooth and nail on the innocent fireplace builder, dispute his bill, rend him in pieces, and reduce him to ashes in the fire of their indignation.

Now, all fireplaces are amenable to the laws of nature, and if a bad chimney be built over a good fireplace, then the righteousness of the fireplace shall be upon it, and the wickedness of the chimney shall be upon it, and you shall not save the wicked chimney by the imputed righteousness of the fireplace. These same natural laws will insure good drafts and perfect immunity from smoke if their few simple requirements are observed.

Make the flue *straight;* angles and short turns are inadmissible.

Make it smooth, to avoid friction from the ascending air.

Make it *large*, not less than 60 inches area of suction for 22 or 24-inch grates. Don't contract the sectional area anywhere, especially at the top. As a chain is only as strong as its weakest link, so a chimney has only the effectiveness of its smallest area. What goes into the flue at the bottom must get out at the top; if it can't get out at the top, it can't get in at the bottom, and that means *smoke.*

We have known architectural wisdom to place on a chimney of 66 inches area of flue a most artistic, elegant, graceful and superb terra-cotta chimneypot with an opening only five inches in diameter. All summer long the glory of the chimneypot was the pride and delight of the family. Alas! this pride was nipped by an untimely frost; fall came, the fire was kindled, and eyes were red with weeping, and black were walls and hangings and furniture with smoke. Five times was that fireplace pulled down, and five different men tried their hands at rebuilding it; at last, a big wind blew off the chimneypot, the smoke rushed out and soared rejoicing to heaven, all tears were wiped away, the house was like the plumed knight, and the *last* fireplace builder received the credit and got his pay.

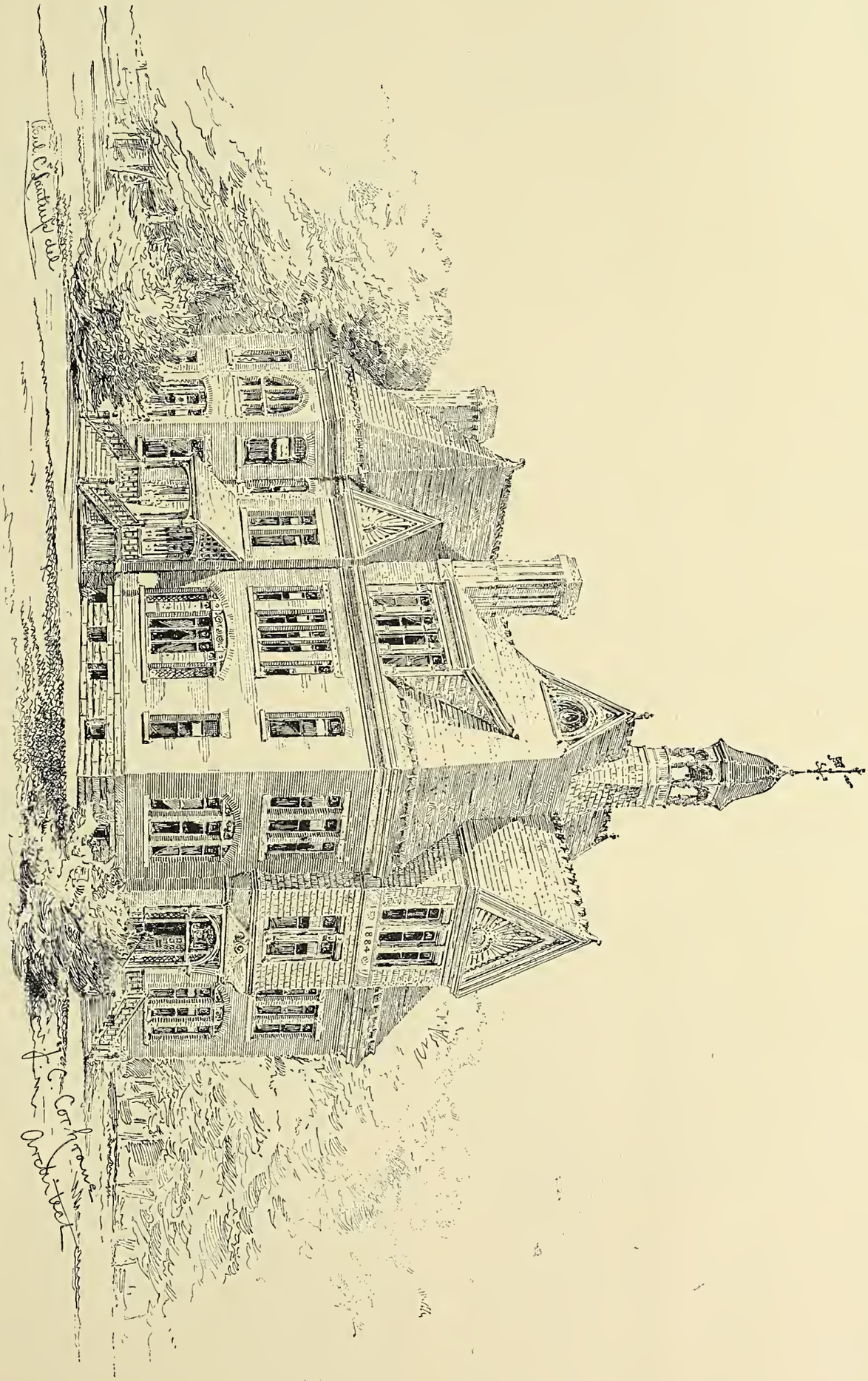
Genius in Architecture.

BY JOHN CLIFFORD, ARCHITECT.

THE chief and only distinction between the ancient and modern worlds, from an artistic point of view, finds its highest expression in the progress made in the development of architecture in each succeeding generation. The artistic impulse thus engendered was never confined to local or individual experiments, but found its free expression in separate features which contributed to the organic unity, the consummate masterpieces of the creative imagination. Architecture is the most fascinating art; its study has been to many a man the crowning glory of a sublime life-task. It is one of the essential requirements of this time honored profession that it should be adaptive, taking the impress of the forms and characteristics of human requirements; and however necessary it may be to restrict it within certain limits, it is still more desirable that it should be free and untrammeled to enable it to fulfill the demands made upon it by the advancing intelligence of our times. This aspect of the case forcibly illustrates its development, first in regard to the conditions which regulate its growth, and, secondly, in the artificial resources brought to bear upon it with a view of adjusting it to the enlarged destinies of man—both views combined representing the devious process by which it is made the exponent of human condition, not only in a state of nature but in the highest phases of civilized life.

The progress of our municipal and material growth goes on like the development of nature—a constant alternation of forces, each destined to absorb the other—the achievements of one generation acting as a stimulus to the thoughts and discoveries of the next—the future being so exclusively contemplated as to completely obliterate every vestige of the past, and swamp all thoughts and memories in their swift current. It is on this account that architecture should be made to bear the most glowing attestation to departed greatness, and endeavor to do justice to those unpretending but essential merits which result from genius rather than character, and like the musical strains of a great master leave no other record than that which lingers in the soul they have warmed with the fire of inspiration. A study of this subject is of such vital importance to the public that it should not only be made to celebrate the occasion, but to transmit its spirit and hallow its remembrance. The consciousness of our distinct national life cannot fail to excite a spirit of emulation, particularly when we consider that architecture is constantly applying its inexhaustible resources to the promotion of human happiness.

No one can fail to perceive the possible influence of a high degree of artistic taste upon man's destiny, the unexplored avenues of wealth open to the practical application of mechanical skill and industry, and the extraordinary natural advantages of our inland metropolis as the arena of great improvements in the art of construction. All worthy enterprises in this chosen field of labor are more or less recognized and honored. The characteristics of human ingenuity, which have reached their acme in no class of our citizens more conspicuously than among architects, are not without their higher types of development among people who unite to a taste for mechanical pursuits a comprehensive view of their utility and results, combining at the same time with a knowledge of material laws



RIVERSIDE SCHOOLHOUSE.—J. C. COCHRANE, Architect.

a remarkable sagacity in their application,—possessing both the faculty to originate and an enthusiasm and strength of moral purpose to advocate improvements of a character essentially adapted to modify the status of society and advance the interests of a profession to which they have consecrated the best efforts of their lives.

The steam-engine, the electric telegraph, the telephone and sewing machine form a distinct era in human progress, which signally illustrates the truth of the assertion that art combined with mechanism form the most vital principle in the universe. This is not only evident in physical results, but is also noticeable in achievements which emancipate man from the tyranny of nature by continually multiplying their beneficent agencies in his behalf. The superiority which is wholly intellectual when not developed in action to meet the exigencies of society incarnates itself too completely to provide for its permanent glory. It seldom affords a vantage ground to the desire for brilliant results without being tangibly embodied in a form more or less identified with the constructive arts. The limning, the artistic research, the prevalence of a cultivated standard of taste, as well as an inspiring literary sympathy, accounts for the complete and satisfactory manner in which architectural experiments are chiefly developed,—particularly when we consider that in no city on this continent do we find more glowing realizations of our desire to excel in this artistic province than our own city. The palatial structures that line our streets and boulevards afford an extraordinary demonstration of the predominance of architectural taste in the Garden City. Yet there is more evidence of ingenuity than genius, the absence of which is accounted for by the fact that the career of an inventive architect exposes him to peculiar trials not only of patience but equanimity. The author and artist can privately test their works before hazarding a public ordeal, but the public nature and great expense of the architect's experiments render it indispensable to submit himself to a scientific jury before his success is guaranteed. Thus the triumphs of architecture evince a gradual approximation to success in almost every instance, and prove conclusively that a division of labor and a union of talent and industry is absolutely essential to high achievements and practical results. But these are generally accomplished through patient self-devotion and by overcoming great and incessant difficulties, and therefore it is just that the architect who brings a great scientific idea or architectural project to a successful practical development should reap all the honors and emoluments. Genius may suggest novel and promising enterprises, but they are useless to mankind until embodied and applied by consistent and pertinacious thinkers in this as in other departments of social welfare.

Constructiveness is a distinct tendency which, in order to realize success in its highest phases, must be impelled and guided by scientific knowledge; an acquaintance with the principles and aptitude of the lever, the wheel and axle, the pulley, the inclined plane, the wedge and screw, when combined with the other natural forces, become infinitely more available when reinforced by equal intelligence in hydraulics, construction, and all other artistic enterprises. Through such an acquaintance with the laws of matter, human genius sways its energies and makes them subservient to purposes of utility and enjoyment.

The Inter-State Exposition.

FROM a mechanical and also an art standpoint, the Inter-State Exposition, held annually in Chicago, this year promises to be an extraordinary success. The Exposition will open September 4 and close October 18. Secretary Reynolds reports that the machinery department will rival that of the railway exhibit a year ago, and that several of the most prominent woodworking machinery firms of the country will exhibit the latest improved devices for the manipulation of wood. There will also be a wide range given to the many special devices that enter into the construction of our homes, and, as heretofore, their furnishing and decoration also. All the available space was applied for a month ago, and since then many applications have been received. The mechanical exhibit is to include several processes not before shown, such as cotton spinning and spooling, woolen looms, andweaving and lapidary work; Mexico is to make a show of her agricultural and mineral products, for which the Chicago, Burlington & Quincy Railway Company is now making arrangements on behalf of the Mexican Central. The art exhibit, in the interests of which Miss Sara T. Hallowell has been abroad the past year, will contain many of the finest paintings exhibited in the Paris Salon. There will be a special exhibition of the painting, "John Brown on his way to execution." The sculpture show will consist, as heretofore, of castings from the antique. Thirty thousand dollars has been expended in improvements on the building, which has received a coating of fireproof paint—the ceiling blue, the trusses red—at a cost of $7,000. The brick addition will cost $14,000. Crane Brothers are putting in another elevator just north of the south fountain, which is to run between iron columns and be provided with an air-cushion. The art hall has been made as nearly fireproof as possible, having a metal roof, iron doors and fire walls for the gallery.

The art department will also contain a special exhibit of the best works of local artists, and the magnificent Earle, those enterprising and talented young artists, Messrs. Rosenberg and Field, who are perhaps the most promising of our local talent, will be represented, and Mr. Bromley has already sent in a list of exceedingly fine sketches that will add to the more than local fame he has already acquired. Miss Annie Shaw, whose realistic work has attracted much attention in past years and won for that young artist many friends, will also be well represented.

The attendance should not only comprise those interested in agricultural pursuits, but all to whom the knowledge of mechanical or building improvements should not lose this opportunity for becoming posted in these various lines.

Our Illustrations.

Pages 10–11. Fragments of European Architecture, sketched by Irving K. Pond, 1884.

Page 15. The "Geneva" Apartment Building, situated at 49 and 51 Rush street, Chicago; for L. P. Hansen; John Addison, architect. The building is 50 feet front by 84 feet deep, three stories and cellar high, and is arranged for six families. The exterior is built of rock-faced buff Bedford stone, with coarses of blue Bedford. The interior is conveniently arranged, well lighted and ventilated, and heated by steam, and finished in a simple and tasteful manner, and is supplied with all the accessories that go to make living in an apartment house pleasant and healthful.

Page 7. Riverside Schoolhouse. J. C. Cochrane, architect. The building is 67 by 94 feet, extreme measurement. Height to top of cornice, 37 feet 9 inches; to top of roof, 76 feet, and to top of belfry finial, 106 feet. Is built of brick, with cut-stone trimmings, with the basement story faced with rock-faced limestone, the roof covered with slate—also the front central bay and the base of the belfry. Style of architecture, Queen Anne. The windows and doors to have transoms filled with very rich cathedral glass—brilliant colors. The interior to be finished with pine, painted in positive colors. The contract for the building proper was awarded to Mason & Berger for $18,844; steam heating to E. H. Cook & Co. for $1,920; plumbing and sewer work to Bassett & Benow for $713; the outside sewer and water pipe to H. H. Remington for $330; making a total cost of $21,807. The building, when completed, will doubtless be the most modern, in plan and style of architecture, in Cook county, and one that the people will justly be proud of.

Page 15. Residence for G. A. Whitney, Waterloo, Iowa, by Josselyn & Taylor, architects, Des Moines and Cedar Rapids, Iowa. The building has a cellar under all, and contains laundry, dry vegetable, provision, boiler and fuel rooms. Foundation of stone, cellar-floor cement. It is a regular frame house, with 4-inch common brick veneer stained and tuck-pointed. Roof of shingles dipped in hot oil. The plastering is rough work, painted in the principal rooms. The woodwork of interior is of oak, butternut, ash, hard and soft pine, all finished with light hard oil. The mantels are all of wood; hearth and fireplace trimmings and vestibule and conservatory floors of tile. Heating is by steam with direct and indirect radiation. Bathroom complete, and stationary washbowls, with hot and cold water in two chambers. Tank in attic is supplied from two large rainwater cisterns. Lighting by gas. The drainage is disposed of through a Field's flush tank and sub-surface irrigation, which worked through the past winter perfectly satisfactorily. The house stands on a six and one-half acre lot, on high ground, commanding a fine view. It was something over eighteen months in building—all except steam heating, plumbing and gasfitting was by day's work, and is well built. Cost, about $15,000.

Page 5. Residence of A. H. Nordyke, Esq., Indianapolis, Indiana; Hodgson, Wallingford & Stem, architects, Indianapolis. This house is built of red brick set with red mortar, and trimmings of stone and terra cotta. The interior finish embraces a choice selection of woods. Hall and dinning-room quarter oak fumigates, parlor San Domingo mahogany; cherry in sitting-room and library, while sycamore, gum, white maple, chestnut, white walnut and ebonized cherry are used for the various chambers. The kitchen and laundry (in basement) and their accessories are finished in white ash. The fireplace treatment is a feature. In the parlor the grate-frame, andirons and fender are of antique brass, with facings and hearth of Mexican onyx. The sitting-room has a glazed fireplace, with arch and spandrils filled with repoussé brasswork. The fireplace of the dining-room is entirely of terra-cotta. The facings of that in the library are art-metal tiles. Most of the hearths are Sienna and Roselle marble, the remainder being glazed tile. The mantels are of wood. These, together with other interior details, will shortly be illustrated. The architects have taken entire charge of the decorations—i. e., frescoing, designing special pieces of furniture, draperies, stained glass, etc. All the principal floors have appropriate wood carpeting. The heating is steam, low-pressure indirect. All plumbing waste-pipes are trapped, and have outlets and fresh-air inlets, and are carried up in such position that they can be heated so that there can be no accumulation of gases. All closets are ventilated on this same principle. The laying off of grounds, stable, fencing (wrought-iron with stone terrace), walks, cisterns, filters and drainage has been included in the architects' plans.

The New Panorama.

THE new Panorama building on Wabash avenue, at the southeast corner of Hubbard court, has entered upon its third month of usefulness, and is continually crowded with visitors. The immense building was finished in nine weeks, and presents an example of the rapidity with which large structures can be erected by people thoroughly in earnest in what they undertake. The building is polygonal in plan, and occupies a plot of ground one hundred and thirty feet on Wabash avenue, one hundred and seventy-four feet on Hubbard court, and is fifty-four feet high. The roof is of iron, spread out like an immense umbrella, and resting on substantial brick walls. The company erecting and operating the building is known as the American Panorama Company, and has a capital of $200,000. Mr. Franklin H. Watriss is the president and Maj. J. B. Hinman, late of the Chicago *Tribune*, manager. The panorama represented is illustrative of the Franco-Prussian war of 1870, and represents the battle of Montetaux, painted by M. Paul Phillippoteaux. The building is lighted by the Excelsior Electric Light, and the walls are faced with a fine quality of Indiana red pressed brick.

A Welcome Offer.

THE PERMANENT EXHIBIT AND EXCHANGE OF BUILDING MATERIALS.

CHICAGO, August 1, 1884.

To the Editor Inland Architect and Builder:

The proposition made through your paper for the organization of a Western Architectural Society to convene at Chicago should receive the encouragement and substantial assistance of every architect, and of those concerned in architectural constructions. To assist in perfecting of such an organization, I will contribute the entire expenses required for the initial meetings, and will provide an assembly-room for the same. I make this offer, first, as I have an interest in the general welfare of the profession, and the desire that the architects of the West shall form an association that shall have some life and action to it, and, second, the efforts that I have put forth to establish a permanent exhibit of building material I desire to continue; and as such an exhibit is for the direct use and inspection of the architect, I consider that it is properly within the province of this institution to furnish a place of meeting for the proposed organization, and to render all aid possible that will further the interests of the profession.

Very respectfully submitted. HENRY LORD GAY.

Practical Sanitary Measures.

CARTHAGE, Ill., July 24, 1884.

To the Editor Inland Architect and Builder:

Apropos to your article in last number of INLAND ARCHITECT AND BUILDER in regard to "The proneness of humanity to procrastinate * * * in the matter of sanitary measures for public safety," etc., I inclose you a circular issued by the mayor of our little city, which deserves the credit at least of being prompt and well meant. We have long enjoyed great immunity from sickness, yet all good citizens greet with satisfaction the action of our mayor. It will amount to several "ounces of prevention," even if cholera never visits us. I wish to add my name to the list of architects favoring a Western Association. If I deserve not a position far up in the grand pyramid, I shall feel honored in being accepted as a foundation stone. The Des Moines architects are right, the growth must be upward, and a broad footing is necessary to stable building.

Yours truly, G. W. PAYNE, Architect.

The following is the circular referred to. It outlines a plan that should be copied in every town in the West, and public-spirited citizens everywhere should follow the excellent example of those of the city of Carthage.—[ED.

TO THE CITIZENS OF CARTHAGE.

At the recent meeting of the State Board of Health, held in Springfield, July 2d and 3d, 1884, the following resolution was adopted:

Resolved, That, while epidemic cholera may be excluded from this country by thoroughly enforced quarantine regulations, yet the best attainable sanitary condition of every locality in the state should be secured, so that in the event of Asiatic cholera effecting an entrance, notwithstanding quarantine, the disease may be met and fought under the most favorable circumstances; and the Secretary is, therefore, hereby authorized to take such action as in his judgment will most promptly obtain a thorough sanitary organization of the state, and the adoption and enforcement of the measures necessary to improve its general sanitary condition.

In conformity to the above the Secretary of the State Board desires that all cities shall be thoroughly cleaned. It is not likely that the cholera will reach our country this season, but it may. It should be remembered that everything which is done in the direction of sanitary improvement benefits the general health of a city and prevents epidemics of any kind. It is therefore obvious to all that nothing in this line should be left undone that can be done to prevent sickness in our city. In this view of the matter, the present authorities are determined to have the city thoroughly cleaned at once. Night soil, garbage, and all other forms of decomposing organic matter, are highly prejudicial to health, and their foul odors are indications of danger.

Clean streets and alleys, and gutters properly drained and kept free from unsightly and filthy accumulations, are of even greater importance during the heat of summer than at other times. The healthy condition of the atmosphere of a locality largely depends upon the conditions of its thoroughfares.

The foundation of healthy living is, obviously, the individual home and its surroundings. Houses, cellars, yards and outbuildings should be carefully inspected, and all accumulations of garbage, refuse and filth of every description should be removed, or, when this is not practicable, they should be rendered harmless by appropriate treatment.

Therefore, it is earnestly requested that *at once* upon receiving this notice all persons will carefully examine their premises, viz.: Barns, pig pens, chicken houses and *privies*, and if they are not already well cleaned to see that they are thoroughly cleansed. All manure piles in barn lots or alleys adjoining your premises should and *must* be removed. Let us do this at once and save health, and even life itself.

Within five days after this notice is received the proper officer will examine all such places as are named above throughout the city, and where the same are in a bad condition, and the request in this notice has not been fully complied with, the ordinances will be *promptly* and *impartially* enforced.

Carthage, Ill., July 18, 1884. O. F. BERRY, Mayor.

The U. S. Encaustic Tile Company.

INDIANAPOLIS, IND., July 29, 1884.

DEAR SIR,—It becomes my duty to notify you that I have been appointed by the Superior Court of Marion County, Ind., Receiver of all the property and effects of the United States Encaustic Tile Company.

All bills, notes and accounts owing or to become due to said company have, by the order of the court, been assigned in writing to me, and you will therefore account only to me therefor. All work hereafter done, and all sales, will be on my account. The order of the court directs me to continue the business as heretofore. I expect to be able to fill all orders, and to finish all work contracted for, promptly and satisfactorily. There is now a large stock of tile on hand, and the stock will be kept up. Orders for new work are solicited and will receive prompt attention.

It is hoped by the stockholders that the company will be speedily reorganized and its affairs taken out of court, until which time I hope to be favored with your esteemed orders. J. L. MOTHERSHEAD,

Receiver U. S. Encaustic Company.

The affairs of the United States Encaustic Tile Company were placed in the hands of a receiver July 24, the cause being not from any mismanagement of their magnificent plant, but owing to the failure of other concerns through which they became involved. The confession amounted to $200,000, but we are informed by the receiver that they "propose continuing the business as heretofore, pushing it in every way possible, and mean to keep up with and distance our competitors," a sentiment that flavors of strong Western energy and enterprise, and which, with their excellent manufacture, should effect rather a victory than even a seeming defeat.—[EDITOR INLAND ARCHITECT AND BUILDER.

Architectural Competition.

DES MOINES, Ia., July 21, 1884.

Editor Inland Architect and Builder:

Inclosed please find circulars Nos. 2 and 3 on architectural competition. We expect more to follow, having a distinct plan in mind, and working in the opposite from what some might expect, we propose to narrow down to the particulars. Having first shown a high aim, we will suggest the way and try to direct to it. Yours respectfully,

E. H. TAYLOR, Secretary A. A. D. M.

CIRCULAR No. 2, ON ARCHITECTURAL COMPETITION.

The St. Louis close competition, which has ended as usual, and the open but straight-jacket one for the Boston library, not as yet decided, are worthy of general consideration by both the profession and those who have charge of such undertakings.

The $10,000 devoted to the purpose by the city of Boston, and the $5,000 employed in secondary prizes at St. Louis, would undoubtedly produce truly valuable results were the competition open to all civilization and properly managed.

Those in charge of such competitions are, however, evidently in advance of American architects upon whom they depend, and who, as a rule, do more to hinder them than to encourage. The sums offered are evidently sufficient to obtain good results, and equally expressive of a blind willingness to progress on the part of those in charge.

Why the results rather hinder than advance architecture should be considered.

It is of first importance in such undertakings that affairs be entrusted to the most capable men, who should have full liberty and power of action. Such judges should not only be capable of making just decisions, but have full authority to decide to the best interests of architecture, even to the reporting that a competition has failed to produce results worthy of rewards offered.

We are well aware American architects will not applaud such decisions; nevertheless they will have to face such music before many years.

A civilized system of adjudging will most certainly place competition beyond the interference of lawsuits.

Nothing could be of greater service to architecture in America at the present moment than what was in the power of Boston to bring about through her library competition. Had she introduced so wise a plan as the employment of three experts to advise in making awards — one valuing first principles as highly as Vaudremer; one as thoroughly versed in the beauties of architecture as Garnier, and one as capable and far-seeing as young Nénot, how inestimable would be the value of their criticisms and decisions! They would see that the way pointed out by Labrouste for the construction of such buildings was not ignored, and impress the fact that some advance beyond what was already known would be necessary to obtain the reward of a first premium.

The effect of such a blow upon the profession in America would be most healthy.

Respectfully submitted by the Architectural Association of Des Moines, Ia., July 12, 1884. E. H. TAYLOR, Secretary.

J. S. BLAKE, President.

CIRCULAR No. 3, ON ARCHITECTURAL COMPETITION.

The shameful mismanagement of competitions in this country and in England greatly blinds the Anglo-Saxon to the only successful method of developing architecture.

This method is so well recognized in more civilized lands that America, not being entirely under British influence, cannot long be kept in ignorance.

Only where competitions are properly conducted has architecture proved its usefulness and developed a natural growth. All nations that thus permit architecture to develop attain one and the same result. This is all the more remarkable when, at the same time, England and America only add to each other's confusion.

On the Continent, especially in Belgium, France and Italy, they are working on a plane that England may never attain to. America must turn from England if she wishes to advance. It is fortunate for her not all her blood has come from such a source.

Architecture is every day proving its high rank among the arts that speak — that speak a language that is universal, superior to dialects. The nations that recognize this give to art free course. They are coming shoulder to shoulder. America should not lag behind.

They who have once listened to that language are too charmed to ever forget the force, the grandeur of its power.

How well it has expressed the strength of organization in the *Arc de l'Etoile!* With what simplicity it calls attention to the stored-up knowledge in the *Libraire Ste. Genevieve;* so charmingly re-echoed and applied in the "Library and School of Art" of the department of the *Bonches du Rhone!* With what noble grace, what majesty, it honors at Marseilles the entrance of the Durance water to the city! With what wisdom it has taken up the law of primary education of '79! How it proclaims and exalts justice at the Belgian capital!

Today, in the very ashes of old Rome, it is arousing Italy to a greater empire.

The greyest head uncovers to architecture when acknowledging that the city of the Great King shall be "the perfection of beauty, the joy of the whole earth."

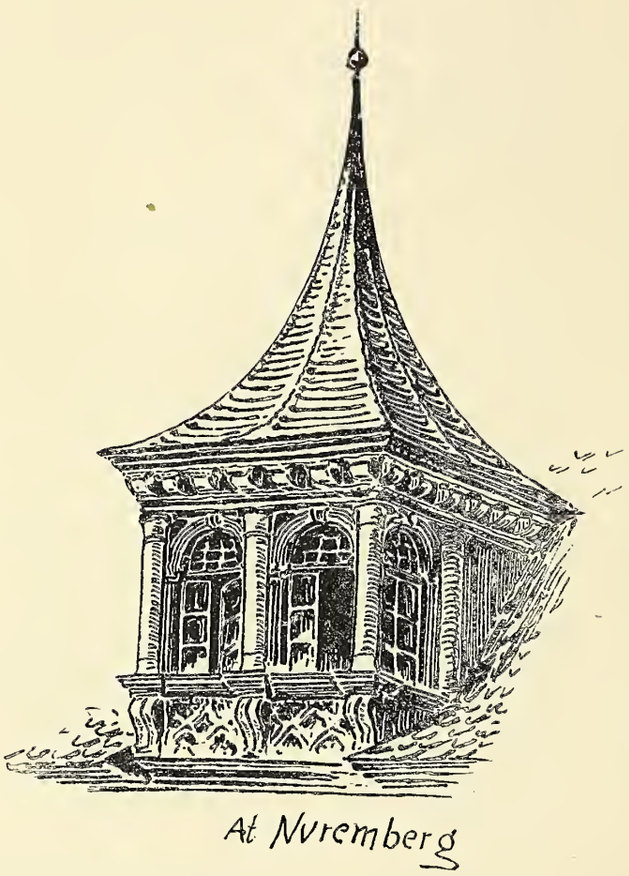
When architecture is honored in this land as it is in the very smallest lands more civilized, it will not fail to show its value. The architects themselves should be the first to show respect.

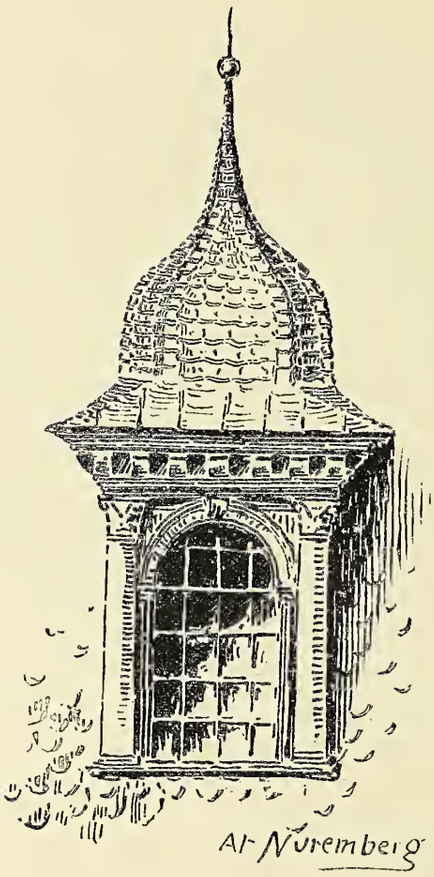
May they proclaim the achievements that are the glory of architecture under fairer skies, and demand that judges who honor such achievements, and not favoritism and rascality, or ignorance, decide the construction of works that would, in this land also, show the worth of architecture which in no land should be put to shame.

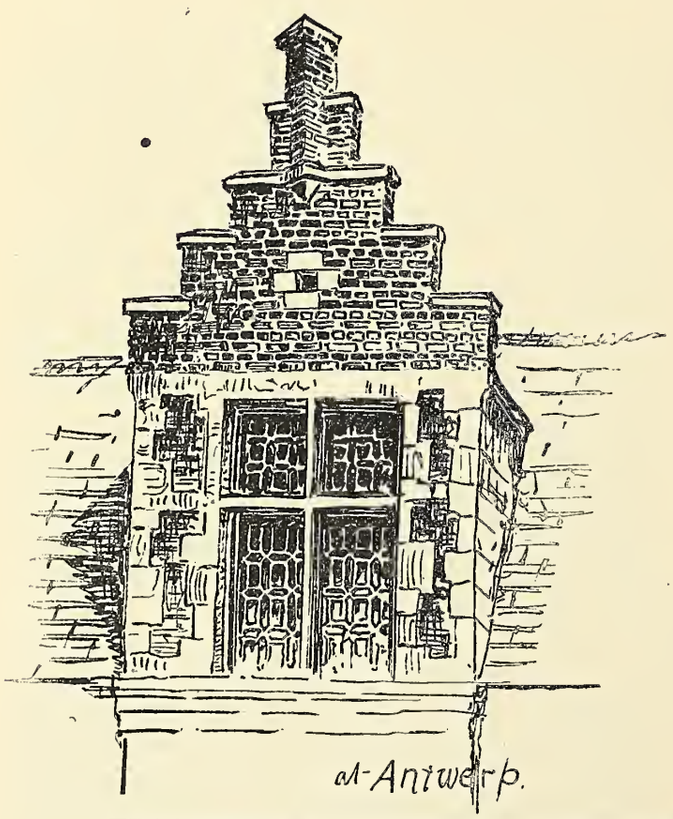
Respectfully submitted by the Architectural Association of Des Moines, Ia., July 16, 1884. E. H. TAYLOR, Secretary.

J. S. BLAKE, President.

IRVING K. POND, whose travels in Europe have been noted in this journal in contributions both illustrative and written, has returned much benefited in health and with a store of architectual information that will be in the future invaluable. Mr. Pond also has brought a large portfolio of sketches and note-books full of notes upon the architecture of the past as observed in the corners of Europe visited by him, destined to form a series of articles, which the public will be treated to in future pages of this journal. We are glad to welcome Mr. Pond home again, for the West has need of architects of broad information and ready intelligence, and there is no better school for gaining this than among the countries whose architecture became old before this country was known.

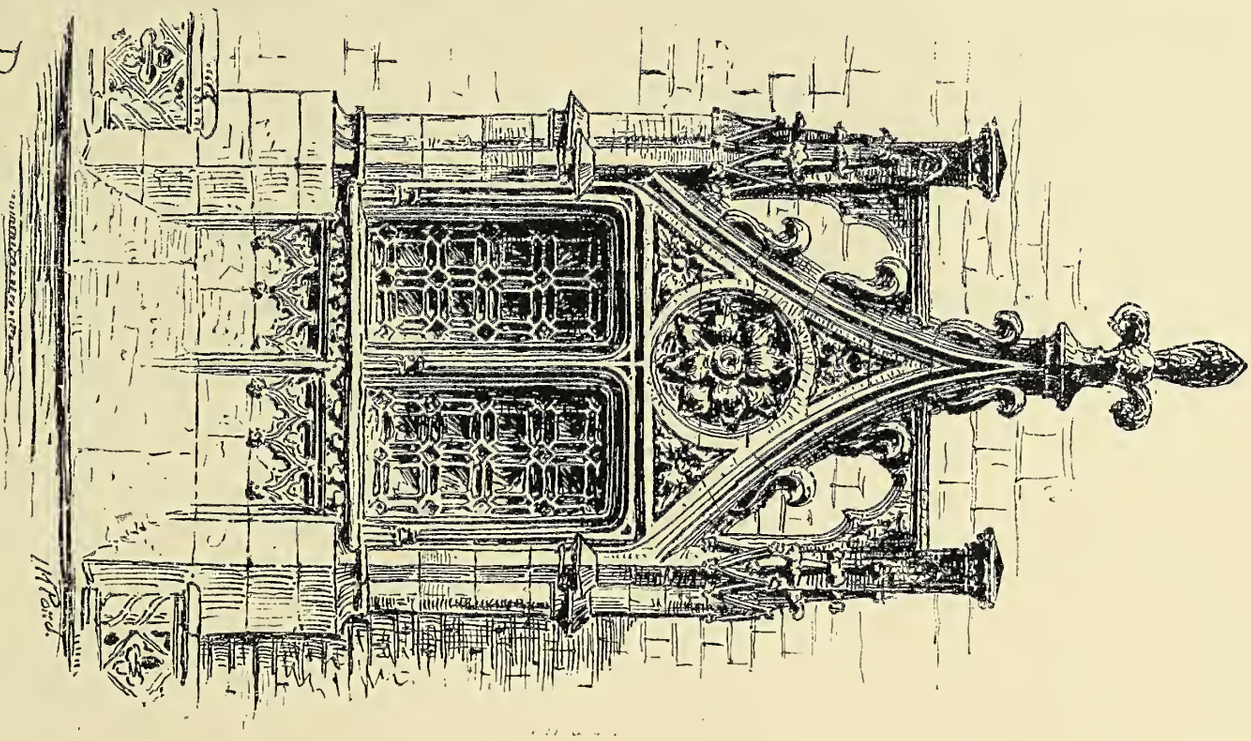




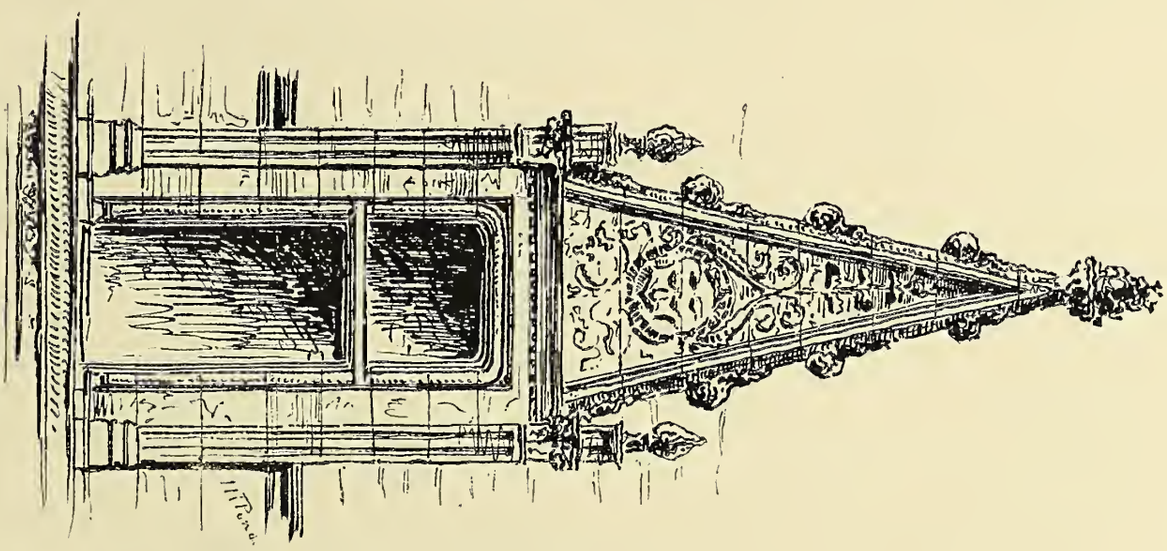




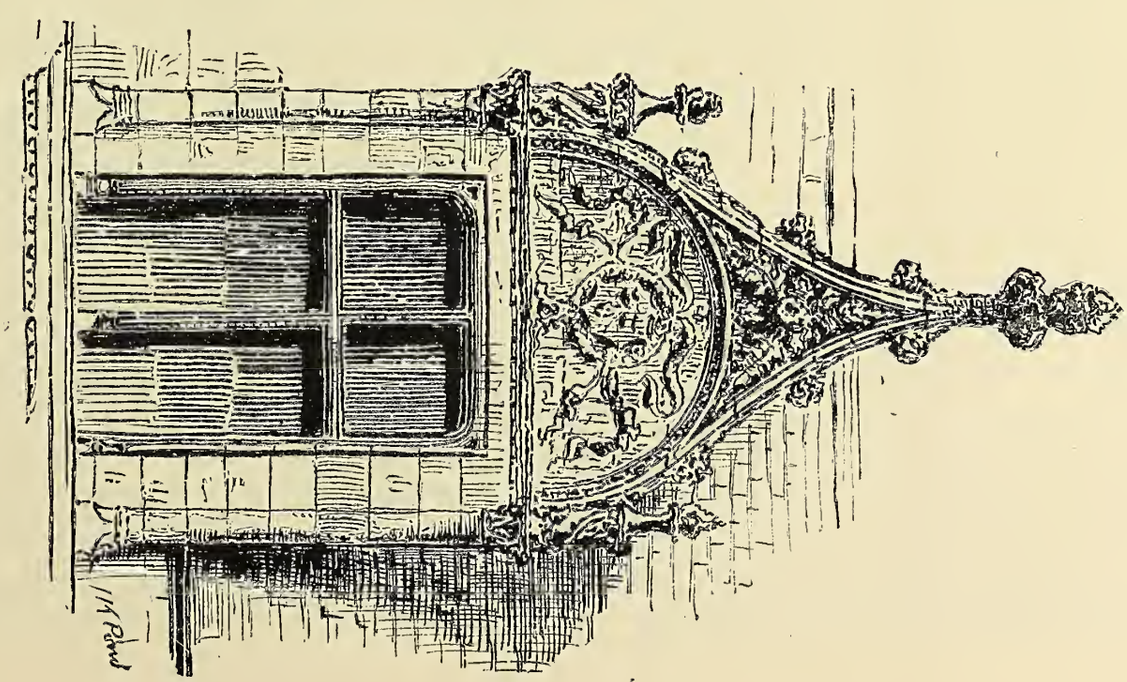
FRAGMENTS OF EUROPEAN ARCHITECTURE.—SKETCHED BY I. K. POND.



Dormer at Blois.



Dormer at Tours



FRAGMENTS OF EUROPEAN ARCHITECTURE.—SKETCHED BY I. K. POND.

A Fireproof Office.

A RECENT building, which has for several months attracted the attention of citizens of Chicago, and also those who pass the corner of Sixteenth and Clark streets in the cars of the several railroads entering in that vicinity, is the new office building of the Pioneer Fireproof Construction Company. It is 24 by 48 feet, two stories and basement high, and is built entirely of fireproof, or fireproofed material. It is a remarkable example of the possibilities of hollow tile in wall construction of any description, as well as when used as a covering material for protection against fire. The walls rest upon a stone foundation, and are composed of 5-inch hollow tile, set and pointed in red mortar, but otherwise without change from the natural surface of the material, which is a uniform buff color. The walls are lined on the inside with 3-inch hollow tile, to give an additional stability, made necessary by the constant jarring by heavy trains passing upon the track about ten feet from the walls. This inner lining in this case carries the floor joists, which in ordinary cases may be set into the outer wall. The roof is pitched, and irregular in shape, formed of wooden rafters, which rest upon the tile wall without additional plate. The roof is covered with slate placed in the ordinary manner. The floor joists are also of wood, and these, together with the rafters and all other wood material used, are covered with fireproof material. The partitions are all of 3½-inch hollow tile, and are as firm and solid as a brick wall and much lighter. The arrangement of the building for the use of the company is complete, as every department of work can be accommodated. In the basement are stalls for five horses, a shop, furnace, and storage rooms. This has no interior communication with the floor above. The first floor contains the counting room, the general manager's room adjoining, and the president's room in the rear. These offices are most handsomely fitted up. They are finished in butternut, with hardwood floor, and walls tastefully decorated. The office safe is built into the wall at a height sufficient to give easy access. A vault is also constructed for the reception of papers. The hall, which occupies one side of this floor, leads to a well arranged stairway of hardwood, which gives access to the second story, where the drafting department is located. This room is well lighted from three sides, and is the envy of every draughtsman who visits it. The arrangement and finish of this office building not only gives to the company an elegant and convenient place of business, but shows to what extent the material of which it is composed can be used in construction. The exterior is decorated with red terra cotta, which harmonizes well with the buff tile, but tile can be painted to any color and made to accommodate any design.

A Revival in Woodworking Art.

IT seems that this is a wooden age, an era when the artificer in wood holds, as it were, the art of home finishing, which is getting to be home furnishing, upon the point of his chisel. The timber lands of not only our own most prolific of countries, but of the world, are laid under tribute for material for his artistic hand to fashion into beauty and vertu. Our houses are trimmed with domestic and foreign woods, each room representing some particular form, color, and species of wood, or with panels, wainscoting, ceiling, etc., showing the best productions of all the forests from northern California to Ceylon worked up by the chisel of the wood-artist into artistic and harmonious shapes. The house of C. J. L. Meyer & Sons Co., in their extensive and conveniently fitted showrooms, show the extent to which the manipulation of woods is carried; and especially in domestic woods their taste is displayed in such a shape that the architect can see the form that design will take when interpreted by their skilled workmen. In one showroom, doors and casings of oak, beech, maple, cherry, walnut, mahogany, and in fact all the woods that this country produces, are shown, some in their natural state and some with the polish which a fine oil finish gives to the surface. In the mantel and mirror department, which is especially fine, the display is as varied as it is beautiful. Here we see a mantel and mirror frame of mahogany, untouched by the finisher. The carving is elaborate, and the design in the highest degree artistic. Cherry is a favorite wood for mantels, and also curly maple, while very soft and beautiful effects can be procured by the careful handling of beech and birch wood. The mantel and mirror manufacture of this firm is becoming well-known, their designs being the product of one of the best designers in the country, and that, together with the skill their long experience in the mill business has given them, a class of trade that is not only enviable, but will promote the best efforts in the production of all that is new and artistic in this important industry.

A Handsome Piano Case.

ONE year ago W. T. Thomas, a Canadian architect, who planned the handsome house of George Stephen, president of the Canadian Pacific Railway at Montreal, also designed the furniture, including a pianoforte, all to be in Queen Anne style. The order for the piano was given to a firm in Boston, and plans and specifications were sent to them. The design of the architect was followed throughout, and the instrument was finished a few days ago. It is of the small grand pattern, and is built of the satinwood of South America, finished in different styles to produce contrasting effects. The case proper is made of nine pieces of satinwood veneering glued together to form one continuous body, which reaches from corner to corner. This is laid off in panels, which are inlaid with rare and costly woods of South America, and bright metal. One panel contains a lyre, the frame of which is of tulipwood, and the strings of metal; the vine that leads away from it on either side has its stem of amaranth, its leaves of cocobola, and its leaf skeletons of glittering metal, while the whole has a snakewood border. A sprig of oak has its acorn cups of amaranth and its bulbs of metal, producing the effect of nature. The carving of the shoulders and scrolls is elaborate, and the polish of the wood rivals the finest satin, and is so brilliant as almost to produce an optical illusion. The legs of the instrument are like the arched doorways of a palace. Each consists of two columns of satinwood, exquisitely carved and inlaid, which come together at the top to form the arch. A gilded caster rolls under each column. The color of the case is the natural color of the wood, and the value of the instrument is $4,000.

Stone Quarrying Machine.

ARCHITECT John Crump, of Philadelphia, has invented and just patented a machine called the patent "Quarrier and stone-shaper." It possesses so many points of intrinsic merit and is of such practical utility as to bid fair to create a complete revolution in quarrying. The machine consists of a portable upright boiler and engine from four to ten horsepower. The blade, or cutter, resembles a circular saw. The machine works on level or on inclined uneven surfaces on which is laid a flat iron railroad track carrying the steam boiler engine and cutter apparatus. The cutter works backward and upward at slow speed so as not to heat the steel cutter teeth while it feeds and cuts forward at the rate of about one inch per minute by thirty-two inches deep in the softer rock; it cuts faster in very soft rock, and less in hard. It cuts the stone as it lies in the earth into blocks of any size or any form of straight lines desired. Its daily capacity is from twenty-five to seventy-five feet of rock in length and thirty-two inches deep. It is estimated that it saves from twenty-five to seventy-five per cent in labor for dressed stone. The saving of the great waste arising from powder blasting and from handling are also strong points of merit. The expense of running the machine, including fuel, oil and attendance, ranges from two to five dollars, and it has been demonstrated that two machines will do the work of forty men.

Architectural and Building Notes.

DURHAM HOUSE DRAINAGE CO. will furnish their system of iron drainage for the Home Insurance building. This ensures to this magnificent structure the best possible system of drainage and sanitary arrangements.

MR. A. D. CONOVER, civil engineer and sanitary engineer, late of Madison, Wis., has opened an office at 51 Montauk Block, making a specialty of designing and superintending work for steam heating, etc. etc.

THE Grand Central depot at Cincinnati, W. W. Boyington, architect, Chicago, was formally opened July 31. M. E. Ingalls, president of the Cincinnati, Indianapolis, St. Louis & Chicago road, gave a reception on the occasion. The building cost $800,000.

ARCHITECT GARNSEY has just completed the erection of the first Congregational church at Sycamore, which will be dedicated on the 9th inst. B. Davies & Son, of Chicago, were the mason contractors, and were very successful in giving to that society a building that will be substantial. It is built of stone and cost about $18,000.

ARCHITECT B. S. TOLAN (successor to T. J. Tolan), of Ft. Wayne, Ind., is about to commence the erection of a new courthouse at Muncie, Delaware county, Ind. Bids will be received until 1 o'clock P.M. on the first Thursday after the first Monday in September, 1884. The building is to be of stone externally and iron construction, thoroughly fireproof, and first-class in every particular.

G. E. HASKINS, the interior decorator and furnisher, has received a commission for the decorating and furnishing of the residence of P. P. Mast, Esq., of Springfield, Ohio. The residence is one of the largest and most handsome in the state, and from one to two years will be consumed in its decoration, and it is needless to say that in the hands of Mr. Haskins it will excite the admiration of all who may be so fortunate as to see the work upon its completion.

ARCHITECT W. L. B. JENNEY has been unanimously appointed architect for the Union League Club, which will build immediately upon their lot, southwest corner of Jackson street and Fourth avenue. The building will be six stories and basement high, but the details have not as yet been arranged. This is the greatest compliment Mr. Jenney has yet received professionally (unless it be the appointment as senior engineer on General Sherman's staff during the war). The cost of the building cannot be estimated, as this will depend upon future plans.

SAYS the *Builders' Weekly Reporter*, of London, England: Six Staffordshire blue bricks, made by Mr. Joseph Hamblet with his improved machinery, were tested at Kirkaldy's on the 4th inst., and resulted in their averaging a crushing strength of 1,064 tons to the square foot. This exceeds the crushing resistance generally given of granites, but the mean results of experiments with Aberdeen granite, which is considered the hardest and strongest kind, Mallet found the crushing resistance on cubes about 1.5 in. square to equal 22,681 lbs. per square inch, or about 1,440 tons per foot.

IT is said that the wood on the north side of a tree will not warp as much as that from the south side, and that if trees are sawed in planes that run east and west, as the trees stood, it will warp less than if cut in the opposite direction. However this may be, it is certain that the tendency to warp when sawed into boards is much greater in green than in dry wood, and that the convex side of the curve is always toward the heart. This warping, due to unequal shrinkage, and to the more open texture of the external portion of the tree, is not found to occur in the middle plank or board of the log, excepting as it may in slight degree reduce the breadth. This quality of not warping, which is in many cases absolutely indispensable for certain uses, as, for example, in the sounding-boards of pianos, is secured in the case of spruce timber by first quartering the logs, and then sawing them with the angle downward. It is then sawed into boards very nearly at right angles with the line of annual growth, and a small triangular strip must be taken off to make the board square edged, but qualities of stability and strength are secured that could not otherwise be had.—*Ex.*

ARCHITECTS C. P. Thomas and John Rodger have formed a partnership under the firm name of Thomas & Rodger. Of these gentlemen Mr. C. P. Thomas has long been known through his works in the Chicago building field, and always with credit to his architectural ability and business integrity. Mr. Rodger is a gentleman and, what is better, a Scotchman; and though educated in Scotland, his latest work has been designing under the direction of some of our leading architects, he having left the office of architect S. S. Beman to form this partnership. The firm is a strong one, and we wish for and predict its success.

THE State Capitol Commissioners of the State of Georgia met in the Senate chamber on July 15 to open the proposals for the construction of the new state house. The *Atlanta Constitution*, from which a few facts are gleaned, says a large number of the bidders were present, the faces of the assemblage being remarkable for intelligence and decision of character. In the report as published, the figures of about forty of the proposals are given, only two of which embraced the entire building. These two were the bids of Chas. Pierce & Co., of Indianapolis, Ind., for $1,198,202.27, and the Hallowell Granite Co., of Maine and Chicago, for $1,163,624.17. As the amount appropriated for the building was $1,000,000, the commissioners had predetermined to limit the contract for the entire building to $800,000, and therefore no bid was accepted. Since then, the plans for the interior, which were very elaborate, have been modified and cheapened so as to bring the cost of the structure within the limit of the appropriation, and new proposals are called for. The bidders in the first instance having been on the site, and having had opportunities to canvass the cost of getting materials onto the ground, will probably be able to figure more closely than they did the first time. There was a vast difference in the bids for some parts of the work.

Lumber Notes.

THE loss of three lumber yards at Toledo, Ohio., by fire, July 9 aggregated $370,000.

THE annual sales of sawed lumber in the United States are estimated to aggregate $223,000,000.

OWING to extremely low water in the Chippewa, no lumber is running to the Mississippi, and no improvement is expected until the September rise.

A REPORT from Eau Claire says a strike of rivermen resulted in a compromise, the employers allowing $1.25 per day. Most of the oar-pullers resumed work, though many sought work in the Minnesota harvest fields.

A CONVENTION of lumbermen will be held at Chicago, August 20, inst., to decide whether or not the Northwestern sawmills will be shut down after September 15.

THE Export Lumber Company, of New York, in their recent semi-annual report, give the amount of white pine lumber exported from that city at 34,873,000 feet, the largest amount which has been exported for the same period in eight years.

THE sawmill-owners of several districts of the Northwest have under consideration a proposition to shut down September 15, prox., but it is said the millmen of Minneapolis decline to be a party to the arrangement.

THE *Southern Lumberman* says there need be no fear of the exhaustion of yellow pine for some time to come, as the great pine belt of the South, which crosses southern Georgia and Alabama to the waters that flow into Mobile bay, covers an area of 11,500,000 acres.

TWENTY-FIVE sawmills in operation between Lynchburg and Danville, Va., produce annually 32,500,000 feet of lumber, worth at place of shipment $10 per 1000 feet. This lumber section was opened to market by the extension, ten years ago, of what is now called the Virginia Midland Railway.

A CONVENTION of the lumber manufacturers of the Northwest is called for August 20, at the Grand Pacific hotel, Chicago. The principal questions discussed will be that of limiting the manufacture of lumber and the feasibility of shutting down of mills early in the fall, and other questions in this connection.

THE report of the Bureau of Agriculture for the year 1883 gives the annual value of forest products at $700,000,000. The magnitude of this sum is more clearly comprehended by comparison with the aggregate value of other products, by which it is found that it is nearly one-fourth of the reported value for the same time of all the corn, wheat, oats, hay, cotton, iron, gold and silver ore combined. The larger portion of the forestry product is in the form of lumber, but the bark for tanning purposes is a large item. The manufacture of matches, it is said, requires wood to the value of $3,298,562.

THE U. S. Consular agent, writing from Truxillo, under date of July 8, 1884, to the *Southern Lumberman*, mentions a very extensive variety of woods of great value that abound in Honduras, and adds that "Honduras supplies numerous dye-woods—the fustic logwood, dragon's blood, anatta, and yellow sanders; also trees producing gums and medicines—as the sarza, copaiba-tree, copal-tree, liquid amber, palma christie, cascarilla, vanilla, and finally, Ule or caoutchouc. In fact, there is hardly a tree but possesses some special value for the purposes of the builder, the cabinet maker, the tanner, dyer, shipwright and the druggist."

THE New Orleans correspondent of the *Lumber Trade Journal*, referring to the contemplated Exposition at New Orleans, says: "I know of no exhibit from the South that will so clearly show one of its vast resources as that of its forest products. Lumbermen have begun selecting samples for exhibition. For size of trees, peculiarities of grain, and different varieties of timber, the exhibition promises to be well worthy of examination, and it is trusted that the effects on the many lumbermen of your section who are expected to visit us will influence at no late day the introduction of Western energy, skill and enterprise in the development of the lumber industries of this section."

THE timber trade of Hamilton, Ont., is much smaller this season than last. McArthur Bros. and Mr. MacRae are doing little, and Mr. Murphy, of Quebec, is shipping, instead of rafting. Flat & Bradley are rafting, but not to such an extent as last year. The rate from Hamilton to Garden Island or Collin's Bay is $22, which is about $13 less than what used to be considered a fair figure. The low rates are a result of fierce competition of the railroads with the vessels. One timber merchant says that the railroads offered to carry his timber from where it was cut up north to Quebec for very little more than it costs to raft it and send it by the lake and river.

Mosaics.

THE contract for the frescoing of the new Board of Trade has been let to E. Phillipson, of Chicago.

THE works of J. H. Pike & Son, scagliola and Accacia artists, are about to establish works in Chicago. They do all kinds of column and pilaster work and show sixteen different samples of imported marble set in mosaic work in combination with common Vermont marble.

THE high place Western architecture is making for itself in the line of both substantial and ornamental buildings is one of the grandest signs of American progress. THE INLAND ARCHITECT AND BUILDER, Chicago, is a reflex of this from month to month.— *Toledo, O., Sunday Journal.*

THE handsomest exchange that reaches our table is THE INLAND ARCHITECT. Its appearance is a perpetual source of delight to the printer; while its contents are as excellent as its typographical appearance is beautiful. The paper is a jewel of the first water.— *Clay, Ottawa, Ill.*

ARCHITECT J. C. COCHRANE has prepared plans for an addition to the Michael Reese Hospital, and the improvements will shortly be made at a cost of $30,000; also the residence of E. Y. Moore, at Evanston, which is under roof and will soon be finished. The style is Queen Anne, and will cost about $6,000.

THE purchase of a block of ground for a union depot at Clinton, Iowa, by a joint commission of the Chicago, Burlington & Quincy railway officials, with those of the Clinton & Cedar Rapids, which latter is practically the same as the Burlington, Cedar Rapids & Northern, will indicate the immediate erection of a depot at that point.

AMONG other amusement places that have been through the decorators' hands this summer, are the Academy of Music and the Chicago Museum. H. J. Milligan executed these commissions, and they are tasteful examples of the latest and best interpretation of the proper mode of decorating amusement halls. The effects in the Academy are especially fine, and this house is as beautiful as it is otherwise attractive to the theatre-goer.

IN the absence of an ample supply of water and the necessary plumbing, the earth-closet is a sanitary device of the greatest importance. There is nothing so potent in the absorption of offensive gases and odors as dry earth, and to all who need such appliances we commend the Myers Sanitary Depot, 94 Beekman street, New York, dealers in plumbers' supplies and water-closets and earth-closets of the most approved description.

IT is with pleasure we call attention to the advertisement of the French Silvering Ornamental Glass Company, of St. Louis. This is the largest concern of the kind in the West, and they are doing very fine work in the several departments. The company lately secured the services of Mr. A. H. Wallis as manager. Mr. Wallis has had many years' experience East, being with Redding, Baird & Co., of Boston. He has a general supervision over every department, and says he can duplicate Eastern prices and guarantees all work to be the best. Special attention given to mosaic and allegorical work.

CLOCKS and clock towers have largely superseded the bell tower, and in the line of clocks of this character those worked by electricity, having electric dials, have the precedence. Their variety is endless. The E. Howard Clock and Watch Company, of New York, have become largely identified with the furnishing of tower clocks. One of the largest quarter-strike clocks in the country is now being placed by them in the tower of the courthouse at Lima, O., and the illuminated dial of the Union depot, recently completed at Detroit by architect Eidlitz, marks the railroad time by a clock of this firm's manufacture. In Chicago there are several towers, notably those of the Northwestern and the Western Indiana railway depots and the new Board of Trade building, that will be supplied with clocks of the best manufacture.

As the merits of Portland cement are becoming better appreciated, the consumption is increasing annually, but it is well for architects, engineers and contractors to bear in mind that a great deal of inferior stock is imported at New York and other Eastern ports, which Mr. John C. Trautwine found to his cost, for he says in his Engineers' Pocket Book: "Many spurious and inferior articles are sold under the name of Portland cement." Portland cement made by such well known manufacturers as I. B. White & Bros. or Gebbs & Company, of England, and the Stettiner Company and Lagerdorfer Company, of Germany, have established a reputation for uniformity of strength and fineness and are extensively used. In fact, the author whose name we have mentioned carried his appreciation so far as to state that "White's Portland cement is exceeded by none." When the cost of transportation from seaboard to this city is considered, it is more economical to use well established brands than any sent on consignment, which evidently are not appreciated at place of manufacture.

ALL good housekeepers hate dust as they do the very —— old-fashioned last year's bonnet, and especially do they hate the light ashes flying from under the grate, dimming the snow of the lace curtains, abasing the pride of the shining bric-à-brac, marring the reflective beauty of mirror or panel, and suggesting forever penitential psalms and sitting in sackcloth and ashes. To all these sufferers we recommend the Common Sense Ash Dump, invented by Charles L. Page. It is simple; it is economical; it can be put under any grate at the cost of a dollar or two. It is a small bit of cast iron, but it does its work; a touch and it swings on a pivot and dumps the ashes without dust, or it slides back and gives passage for the ashes from the grate. Everyone likes to wield the poker; it is fascinating

as any sceptre, and this little "dump" instigates to a skillful use of the universally popular implement. It saves time and labor, health and temper. It is a cast-iron little servant; will stand any amount of abuse and not answer back; does its work meekly and is never impudent; never grumbles at the "feed"; never is ruffled by the fiery temper of its "grate" superior: in fact, is so thorough and so reliable that we may say of it, as used to be said of a good book, "No household ('gentleman's library' used to be the term) is complete without it."

THE "fireplace" is one of the institutions which give way very reluctantly to modern improvements. That the stove more fully supplies the need for which the fireplace was designed, and at much less expense for fuel, is universally conceded, and yet no human residence is considered complete that has not the open fireplace. The use of furnaces or stoves may render it wholly superfluous for heating purposes, and yet the occupants of the house would not be satisfied to dispense with it, and are always gratified to see the fire glowing in the grate and to sit around the cheerful hearth when the fitful light illuminates and darkens by turns the faces of the complacent semi-circle looking into it. Around no other part of the house does so many happy associations cluster, and no occasion is fraught with more solid home comfort than when, after the work of the day, the family gather around the open fire. But for all times and occasions the old-fashioned fireplace will not do. It is, at times, entirely too one-sided in the distribution of its benefits, and can never have the unqualified approval of the shivering individual who seeks its warmth on a very cold day. The modern fireplace, however, is a different thing. It is so constructed as to save and throw into the room much of the heat which in the old-fashioned kind would go up the chimney, but has all the advantages and comforts of an open fire. The Jackson Ventilating Grate, which is so constructed, saves a large portion of the heat which in the old-time fireplaces would go up the chimney, and at the same time warm a large room as thoroughly in all parts as a stove would warm it. The grates are made on the principle of a furnace, with an air-chamber, which is supplied with air from the outside of the house, and discharges the heated air through a register into the room just as rapidly as the air in the room is drawn out by the draught of the chimney. By this means thorough ventilation is secured also at no expense of cold currents from crevices in doors and windows. Grates of this kind are constructed so as to warm rooms on different floors, by a pipe which conducts the air from the chamber behind the fire to the room above. In these air-chambers there are over fifteen square feet of radiating surface. The chambers are separated from the fire by a cast-iron shell, which has no joints and affords no chance for gas to get through, and which, with the air circulating freely behind it, cannot become so intensely heated as to burn out. From the descriptions of this heating device which come to us, we feel confident it will meet a long-felt want.

New Publications.

THE ELECTRIC LIGHT IN OUR HOMES. By ROBERT HAMMOND. London: FREDERICK WARNE & CO.

This little book contains sundry lectures delivered by Mr. Hammond at sundry times, and explains in a popular form the principles of the science, the apparatus and fittings used, all the necessary arrangements for the use of the electric light in private residences, and the advantages to be derived from it. The subject in its various bearings is fully illustrated by woodcuts, and there are two photographs of rooms, dining and drawing rooms, in the author's house, which are fitted with electric lamps. The book will be found instructive and interesting.

"THE ART INTERCHANGE," New York, is doing more for the advancement of home art and the instruction of amateurs than all the other art publications this side of the Atlantic combined. In the number of July 31, "Le Printemps," by Alfred Stevens, an exquisite picture (18 by 8½ inches), was given as a supplement. It shows a landscape, in the foreground of which is the full-length figure of a girl leaning against one of two trees, which rise straight, tall and bare behind her. The immediate foreground is filled with grasses, wild-flowers and birds, while a little to the left is a small tree in full blossom. The picture as a whole is one of the most beautiful examples of engraving ever offered to the public, and is well worthy of a frame. Published by William Whitlock, 140 Nassau street, New York. Price $3 a year.

Inventive Genius in Building.

301,124. Device for Preventing Percussion or Water-Hammering in Pipes. Francis Hyde, Toronto, Can.
301,125. Hoisting Apparatus. Maximillian Jacker, Florence, Wis.
301,131. Mold for Brick and Re-Pressing Machines. Geo. H. Kuntz, Belleville, Ill.
301,149. Mixed Paint. Henry C. Pettee, Vallejo, Cal.
301,153. Hoisting Apparatus. De Witt Clinton Prescott, Marinette, Wis.
301,155. Brick-Kiln. John Puerner and William Haumerson, Jefferson, Wis.
301,157. Weather-Strip for Window-Sashes. George P. Rasck, Des Moines, Ia.
301,230. Ventilating Sewers. William M. Green, Chicago, Ill.
301,231. Crane. P. Henry Griffin, Detroit, Mich.
301,252. Alarm-Lock. Alexander F. McCollam, Fair Play, Cal.
301,264. Hot-Air Fireplace. Doyel Pearson, Memphis, Tenn.
301,362. Weather-Strip. John T. Hall, Zenobia, Ill.
301,388. Door-Hanger. Edward T. Prindle, Aurora, Ill.
301,429. Window-Shutter. Ludwig F. G. Boeckelmann, Davenport, Ia.
301,453. Blind-Slat Adjuster. Richard M. Martin, Minneapolis, Minn.
301,468. Combined Ice-House and Cooling-Chamber. John Alexander, Toronto, Ontario, Can.
301,471. Brick-Machine. George H. Aregood, Chicago, Ill.
301,501. Weather-Strip. David B. Kingsbury, Ravenna, O.
301,586. Safety-Catch for Elevators. William Giles, Mount Olive, Ill.
301,587. Brick-Kiln. William M. Green, Chicago, Ill.
301,742. Composition for Roof-Paint. Samuel N. Metzler, Jackson, Mich.
301,760. Cowl. Ephraim Sears, North Salem, O.
301,765. Hod-Iron. Andrew J. Spicer, Portland, Ore.
301,856. Hanging Bells. Gardiner Campbell, Milwaukee, Wis.
301,862. Burglar-Alarm. John B. Chase, Aurora, Ill.
301,885. Fireplace. Egbert Dewey Haven, Albany, Ore.
301,904. Chimney. Charles B. Loveless, Worthington, Minn.
301,932. Valve for Water-Closets. William Smith, San Francisco, Cal.
301,970. Key-Holder. Robert Duerr and George F. Rohn, Milwaukee, Wis.
302,003. Hydraulic Elevator. Albert F. Knorp, San Francisco, Cal.
302,030. Fireplace Stove. James D. Richards, Patriot, Ind.
302,078. Elevator. Jacob Wilmenour, Washington, Ind.
302,095. Weather-Strip. Gustav Burkhardt, Homer, Ill.
302,110. Waste-Pipe Protector. Hirsch S. Danziger, Chicago, Ill.
302,149. Burning Brick, Tile, etc. John K. MacIver, Detroit, Mich.
302,172. Self-closing Hatchway. Richard D. Thackston, St. Louis, Mo.
302,180. Crane. Samuel T. Wellman, Cleveland, O.
302,183. Handle for Crosscut-Saws. John Quincy Adams, Jr., Blanchard, Mich.

Synopsis of Building News.

Attica, Ind.—Architect Geo. W. Pearson reports not much doing, but outlook good, with the following all under way or completed: For Mr. A. Zeigler, a two-story eight-room brick residence, to cost $3,000. For Mr. Frank Fenestine, a two-story six-room brick residence, to cost $2,000. For Mr. John Maguire, a one-and-one-half-story frame cottage, to cost $1,500. For a stock company, a three-story and basement mill, 40 by 60 feet, to cost $6,500. For the city fire department, a one-story brick building, 40 by 70 feet, to cost $3,000. For Orie Clark, a two-story "Queen Anne" residence, eight rooms, to cost $3,000. For Mr. Geo. Pearson, a two-story seven-room "Queen Anne" residence, to cost $2,500. For Mr. R. Beamer, a two-story frame residence, ten rooms, to cost $2,500. Also several smaller houses, ranging in price from $800 to $1,500.

Atlanta, Ga.—Architects Bruce & Morgan report building not so active since the financial crisis; material and labor cheaper than last season. The following is work of their office: Newton county courthouse at Covington, Ga., two-story brick, 72 by 100 feet, with slate roof and galvanized iron cornice, cost $28,000; under way; James Smith, builder. Hall county courthouse at Gainesville, Ga., two-story brick, 86 by 95 feet, slate roof and galvanized iron cornice, cost $30,000; under way; James Smith, builder. Campbell county courthouse, Jackboro, Tenn., two-story brick building, 50 by 70 feet, slate roof, galvanized iron cornice, to cost $16,000; contracts will be let August 15; address J. S. Lindsay, clerk. For Col. C. M. McGhee, memorial library building, 45 by 105 feet, three-story, pressed brick and stone, slate roof, to cost $25,000; work done by the day. At Newman, Ga., a Baptist church, brick building, 50 by 100 feet, slate roof, to cost $15,000; under way; J. S. Westbrook, builder.

Carthage, Ill.—Architect Geo. W. Payne reports building operations quiet now, although mechanics are kept busy on small work, repairs, etc. The main building on the county poor farm burned on the 23d inst. It was a three-story brick, 50 by 64 feet, with shingle roof. All the floors, partitions and ceilings were of southern pine; even the outside brick walls were lined on the inside with the same inflammable material; no wonder, then, the fire did its work in less than two hours. It was only by the almost superhuman efforts of the superintendent that no lives were lost. The building cost about $10,000; was insured for $6,000. A meeting of the supervisors is called, at which some action will be taken to rebuild immediately. It is to be hoped the lesson will not be lost, and that the next building will make some pretensions, at least, of being fireproof.

Cheyenne, Wy. Ter.—Architect Jas. Anderson reports prospects for steady improvement are very favorable, with the following buildings under way: For Idelman Bros., a three-story brick building, 40 by 132 feet, to cost about $42,000; E. R. Hurd, builder. For Mr. Edward Blewett, at Fremont, Neb., a two-story brick residence, 52 by 64 feet, to cost $19,000. For W. A. Johnson, at Green River, a two-story brick and stone building, 30 by 100 feet, to cost $11,000.

Chicago, Ill.—The work of the month has progressed steadily, the only new office building placed in architects' hands being that for Mr. Hansen on the J. Q. Adams lot. Plans for this are being prepared by architect John Addison. It will be six stories in height and will cost about $160,000. The first floor will be devoted to restaurant or store purposes and the remainder fitted up for offices. The sum to be expended will allow of complete fireproofing and other requisites of a first-class building. The price of common brick has fallen so low that the builders are figuring upon an active fall. The work reported this month from the city offices averages about equal to that of last month, and the majority of architects reported unperfected plans for future work.

Secretary Ambler, of the Citizens' Association, is about to issue a report upon the tenement house question. It gives figures regarding alleged overcrowding of the poor in unhealthy tenements, and as a remedy proposes the formation of a building association and the erection of tenements upon the Peabody plan of London, with the purpose of not only supplying comfortable homes but at a moderate rent.

The boulevard system of Chicago, which now aggregates something like fifty miles, is to have an addition by an extension of the Michigan avenue boulevard from Thirty-ninth street to Fifty-fifth street, through Hyde Park. This action of the Hyde Park commissioners will leave the street from Thirty-fifth to Thirth.ninth street to be boulevarded by the city, which should be immediately done and make Michigan avenue a boulevard six miles in length, and one of the longest and most handsome drives in the country.

Architects Burling & Whitehouse have let contracts for two stores for Judge Trumbull, on State street, brick, three stories and basement, 22 by 70 feet each, cost about $16,000. Also have prepared plans for the Church of the Epiphany, on Ashland avenue and Adams street. It is 119 by 55 feet; has a seating capacity of eight hundred. It is to be built of Lake Superior variegated stone, Norman Gothic, high roof, covered with Bangor slate, low walls of rock-faced stone.

Architect J. W. Ackerman has prepared plans for a residence for S. J. Sherwood on Thirty-seventh street, near Linley avenue; pressed brick front, two stories and a cellar, 22 by 55 feet, cost about $6,000; contracts not let.

Architect W. L. Carroll has prepared plans for a frame residence for Rev. Joseph Cummings, LL.D., at Evanston, two stories, basement and attic, 39 by 58; no contracts let. Also prepared plans for a cottage for L. E. Rivlet at Lake Mills, Wis. Queen Anne style of architecture, two stories and cellar, 30 by 47 feet, containing eight rooms, cost $1,500.

Architect J. J. Flanders has prepared plans for a residence 25 by 69 feet, for H. C. Morey, on Jackson street near Ashland avenue, Indiana pressed brick and cut stone, two stories and basement, with mansard roof. The first story is stone, the mansard story slate, cost $10,000. Also three-story and basement brick flats, 24 by 72 feet, cut stone front, on Aberdeen street near Madison, for the estate of Mr. Bernard.

Architect W. W. Boyington has just finished a block of stores and flats on West Twelfth street, for Messrs. Greenlee Bros. They are built of brick, four stories and basement, 50 by 108 feet, cost about $20,000. Also prepared plans for a block of stores and flats on the corner of Thirty-fifth and State streets, three stories, pressed brick, 75 by 140 feet, cost about $35,000. Also just finished for Rathbone, Sard & Co., warehouse on South Clinton, north of Harrison street, five-story brick, 140 by 100 feet, cost $50,000. Also contracts let for the Commercial Deposit vaults in the Royal Insurance building. It contains capacity for nine thousand boxes, anterooms for ladies and gentlemen, will be warmed and ventilated by a system of steam forced into the rooms, and pulled out by the means of forced ventilation as well as exhaust ventilation. It is intended they will be among the finest deposit vaults known in the world. They will increase the cost of the building about $50,000.

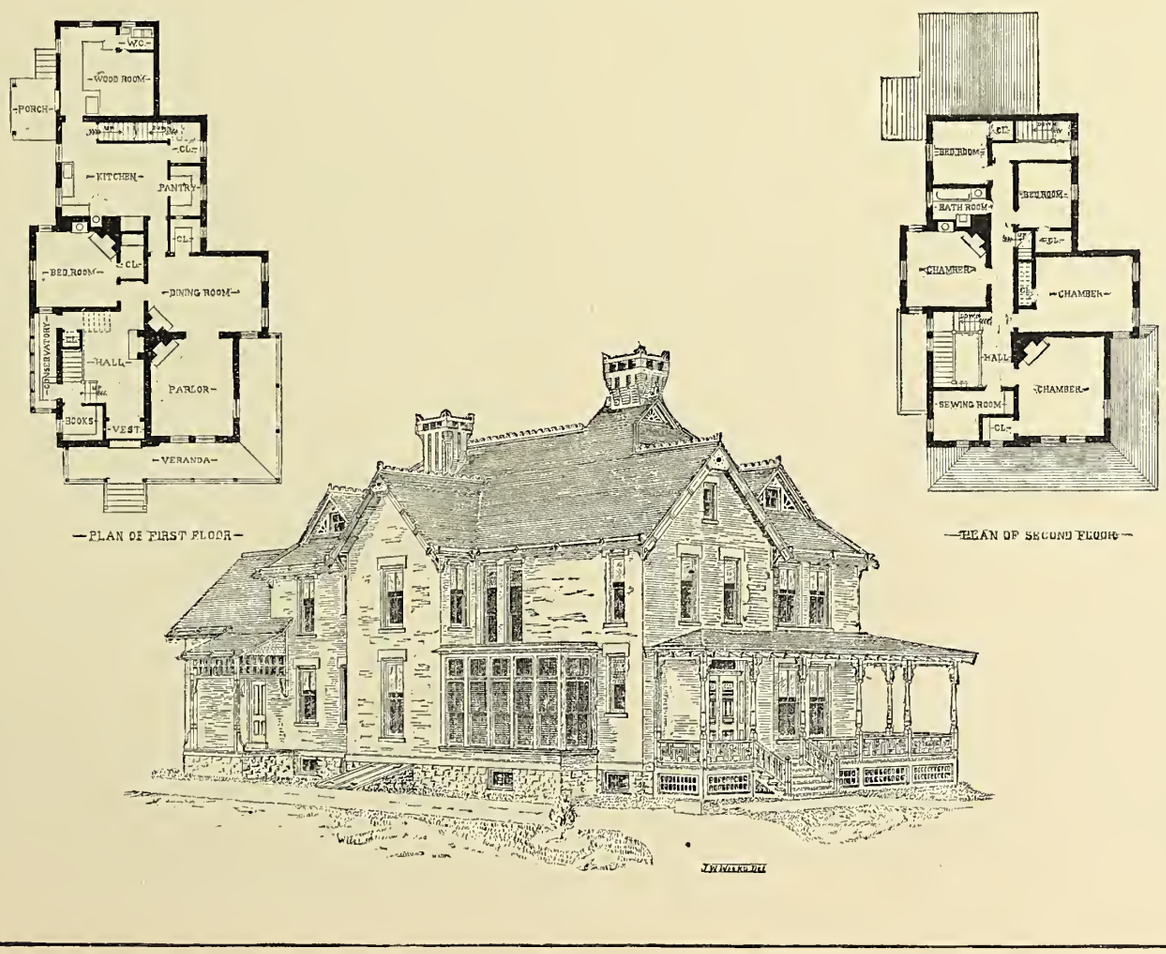
Architects Bauer & Hill have let contracts for two houses on La Salle avenue near Division street, for W. F. Stolker, Lemont Limestone front, three stories, basement and attic, 45 by 76 feet, cost $21,000; they are divided into six flats. Also contracts let for three flats for A. C. Hesing, on Chestnut street between State and Cass; pressed brick and Burling Stone basement, three stories, 24 by 70 feet, cost $10,000.

Architect M. L. Beers is taking figures on a residence for Capt. Thos. G. Butlin, president of the Goodrich line of steamers, to be built near the corner of Fifty-first street and Jefferson avenue, Hyde Park. The house will be built of brick, two stories and basement, 40 by 56 feet, Queen Anne style, cost about $11,000. The upper rooms will be elaborately finished in hardwood. Also building for Miss M. A. Waters a flat at 2943 South Park avenue, built of pressed brick, two stories, 23 by 56 feet, cost about $4,000. Martinsen & Ottesen, builders.

Architect Alfred Smith has plans for two-story flats, 25 by 84 feet, for D. R. Frazer, to be built on Greenley near Oakley street, of brownstone, Anderson pressed brick and terra cotta, cost about $10,000. Also two stores for Mr. Mooney, on Cottage Grove avenue near Twenty-fourth street, three-story and basement, of brick, 44 by 48 feet, cost about $10,500. Also under way, two flat buildings for Wm. Hoyt, on Illinois street near Cass, four-story and basement, built of brick, 50 by 46 feet, cost $16,000.

Architects Treat & Foltz have a house for Geo. W. Adams, on Indiana avenue near Twenty-third street, built of Anderson pressed brick, brownstone trimmings, two stories and basement, 25 by 74 feet, cost $6,500; A. J. Holburg, builder. Also a house at Peoria, Ill., for W. F. Reyburn, frame, three stories and basement, 36 by 40 feet, cost $8,000. Also for E. J. Lehmann, Mansard roof on residence at 399 Michigan avenue, cost about $15,000; J. G. Lobestine, contractor. Also preparing plans for a residence for W. J Watson, to be built of brownstone, three stories and basement. Also taking estimates on a three-story and basement house for J. W. Elsworth, to be built on Forty-sixth street, cost $40,000.


Jas. Addison Architect
Henry Krueger del


WC
WOOD ROOM
PORCH
CL
KITCHEN
PANTRY
BED ROOM
DINING ROOM
HALL
PARLOR
BOOKS
VEST
VERANDA
PLAN OF FIRST FLOOR
BED ROOM
BATH ROOM
CHAMBER
HALL
SEWING ROOM
PLAN OF SECOND FLOOR

Architect J. H. Huber is preparing plans for a double flat building, two stories and basement, for M. W. Diffley, on Finney street near Wentworth avenue; brick, 50 by 50 feet, cost $8,500. For Mrs. P. Portman, a $6,400 dwelling at No. 603 West Superior street. Also a two-story and basement brick building for flats, on Dearborn avenue, for J. H. Betterman, brownstone front, 25 by 70 feet, cost $10,000. Also four frame cottages for Mr. Goudey at Lake View, cost $2,500 each. Also a residence for Mr. Staab, on Lincoln Place, of brick, one story and basement, 25 by 56 feet, cost $3,500. Also Tammany hall in Rochester, N. Y., to be built of brick and stone, 60 by 75 feet, three stories, cost $10,000. Also a residence for Mrs. E. Ermal, on West Randolph street, brick, two stories, cost $7,000. Also plans for W. A. Young for three-story brick flats, 22 by 56 feet, at 328 Market street, cost $7,000. Also a coalshed for J. L. Hashney, on the corner of Halsted street and the river, cost $10,000. No contracts for any of the above let.

Architects Wheelock & Clay have plans for the remodeling and construction of the Heinemann College and Hospital on Groveland avenue near Twenty-ninth street, and are receiving bids for the same. The building heretofore occupied, and which was burned several months ago, will be much handsomer and more convenient than ever before. It will be 64 by 40 feet, built of brick and stone, four stories, with a large balcony over the entrance, cost about $10,000. Also a house for Mr. Logan, at 2919 Prairie avenue. It will be of pressed and moulded brick, three stories and basement, 30 by 65 feet, cost $30,000. Also a stable for L. J. Lamson, on Grand boulevard near Thirty-eighth street, two-story brick and stone trimming, high-pitch roof, 42 by 21 feet, cost $4,000.

Architect H. R. Wilson reports: For Mr. Alexander Moody, corner Washington boulevard and Leavitt street, a two-story and attic residence, 34 by 54 feet, cost $15,000; under way. For Mr. W. H. Durant, at 626 West Monroe street, a three-story and cellar residence, 25 by 60 feet, to cost $6,000; under way. For Mr. E. Ramsdell, at 239 Warren avenue, two-story, cellar and flats, 28 by 62 feet, to cost $6,000; under way. For Mr. W. R. Raymond, at 3002 Vernon avenue, two-story, cellar and flats, 24 by 58 feet, to cost $5,000; under way. For Mrs. A. Heller, Twenty-ninth street and Wabash avenue, two-story and cellar residence, 25 by 60 feet; also a barn, 25 by 30 feet, cost $8,000; projected. For Mrs. L. J. Whitman, on Congress east of Laflin street, a three-story stone front dwelling, 22 by 66 feet, cost $8,000; under way. For Mr. A. L. Sass, at Racine, Wis., a factory building, 28 by 130 feet, to cost $10,000; under way. For Mr. C. H. Briot, 1013 North Clark street, a three-story apartment house, 24 by 48 feet, to cost $4,500; under way. For Mr. W. H. Hafner, at 355 South Hoyne avenue, a three-story residence, 24 by 42 feet, to cost $5,000; under way. For Capt. Beckwith, on Park avenue, two two-story and basement residences, 20 by 50 feet, cost $8,000; under way. For Mr. Frank Campbell, Loomis and Jackson streets, two three-story residences, 32 by 60 feet, cost $8,000; under way. For Mr. B. A. Weaver, two-story flats, 24 by 50 feet, to cost $3,000; under way.

Architect J. M. Van Osdel is building an addition to the Memory office building on the corner of Pacific avenue and Van Buren street. It is of brick, 50 by 70 feet, cost $5,000. Also flats for Mr. Doering on Irving place, corner of Monroe street. They are two stories and attic, 66 by 25 feet, of pressed brick with brownstone trimming, cost $8,000. Also a $12,000 residence at Nos. 889 and 891 West Adams street, for J. W. Maynard.

Architect J. N. Tilton is building a house at Kenwood and Forty-seventh streets, for Isaac N. Ash. It is a frame residence, two stories and cellar, 42 by 42 feet, interior finished in hardwood, cost about $10,000. Also three stores on Halsted street, for the estate of J. K. Case, three stories, 75 by 64 feet, built of pressed brick, with stone trimmings. The upper stories are finished in flats, cost about $22,000.

Architect L. B. Dixon is building a residence for John G. Shortall, on Prairie avenue, near Sixteenth street, of variegated brownstone, basement of brick, slate roof, two stories above basement, cost about $12,000. For Chas. I. Dangler a residence on Prairie avenue, south of Twenty-ninth street, to be built of St. Louis pressed brick, with Connecticut brownstone trimmings, two stories and mansard roof, 25 by 83 feet, cost $15,000. Also a residence for Mrs. Julia Slafter, on Forest avenue, between Thirty-first and Thirty-second streets, brick front, two stories and basement, 25 by 60 feet, cost about $7,000; McNeal Bros., builders. Also seven cottages for C. D. Dupee, on Lake avenue, corner of Fifty-second street. They are to be of brick, 20 by 55 feet, and are for tenement purposes, cost about $1,800 each; Messrs. Aelmers & Bro., builders. Also two three-story store buildings, 38 by 60 feet, for Wm. Brown, on the corner of Douglas and Rhodes avenues, stone front on Douglas avenue and brick on Rhodes avenue. The two upper stories will be divided into flats, cost about $12,000. Also plans for a residence for W. W. Crandall, on the corner of Thirty-seventh street and Lake avenue, 35 by 50 feet, two stories and low basement, brick front, stone trimmings, cost about $6,000. For Mrs. E. W. Dupee, two residences, 23 by 60 feet each, on Forty-sixth street near Greenwood avenue, frame, with brick basements, cost about $7,000; Hogan & Gravy, builders. Also remodeling a house for Mr. D. H. Benton, on Prairie avenue, near Forty-sixth street, cost about $5,000.

Architect John Bruhns is building a block of brick stores and flats, 65 by 65 feet, for J. Keilmann, on the corner of Lincoln avenue and Larrabee street, four stories and attic high, cost about $14,000. For G. Schert, at 441 Sedgwick street, a tenement house, built of brick, three stories and basement, 22 by 60 feet, cost about $8,000. Also a brick residence, two stories and basement, 22 by 56 feet, for Mr. Kaub, to cost $6,000. For F. Enders, brick store and flats, on Chicago avenue, to cost about $10,000. For J. Lehmann, at 49 Rush street, a three-story brick residence, 25 by 73 feet, to cost about $9,000. For Chas. E. Heyer, on Lincoln avenue, a three-story brick building, 22 by 66 feet, to cost $7,000. For John Hanson, adjoining the above, a brick residence, two stories and basement, 22 by 52 feet, to cost $4,000. For A. Carstens, a three-story brick tenement house, 21 by 64 feet, to cost $5,000. For J. Schumm, on Mohawk street, three-story brick flats, 22 by 60 feet, cost $7,000. For Mr. Hedrick, on Larrabee street, between Burling street and Belden avenue, three-story flats, 22 by 64 feet, to cost $8,000. Also a store and flat building, 25 by 64 feet, on Eighteenth street, for J. Claussem, to cost $6,000. Also a four-story building of flats, 25 by 80 feet, for J. Richardson, on the corner of Blackhawk and Hurlbut streets, to cost $9,000. Also a two-story frame building, 25 by 52 feet, on Lake avenue, for J. Schulinn, to cost $5,000. Also at No. 1 Hurlbut street, for G. Williams, a three-story brick building, 24 by 60 feet, to cost $6,000. For Mr. Bluemerth, a three-story frame residence, 62 by 48 feet, on Lake avenue; cost $4,500.

Architect J. Otter is building a three-story and basement brick house 21 by 68 feet for J. H. Rumsfield, at 125 Townsend street, to cost $6,000; A. Spies, carpenter. Also one-story and basement house, 22 by 50 feet, on Halsted, near Sedgwick street, for J. Sweeney, cost about $3,000; A. Johnson, mason; Peter Larson, carpenter. For D. O'Conner, a brick store and dwelling-house, 25 by 80 feet, on the corner of Market and Locust streets; cost $10,000; masons, Fagerland and Nelson; carpenter, T. Larson. For M. O'Shaughnassy, a two-story and basement store and dwelling-house, 50 by 80 feet, corner Clark street and Belmont avenue, cost $8,500; masons, Fagerland and Nelson. For M. A. DeLang, a two-story and basement brick residence, 22 by 71 feet, to cost $6,000. For A. Monson, on Hill street near Sedgwick, a three-story and basement brick residence, 23 by 49 feet, to cost $7,500; mason, C. Lind; carpenters, Sendgren and Bush. For J. Nelson, a dwelling-house on Miller avenue near Oak street, three stories and basement, of brick, 40 by 46 feet, cost $8,000; mason, A. Johnson; carpenter, C. Nelson. For J. Hart, on the corner of Townsend and Locust streets, a four-story and basement dwelling-house, 25 by 80 feet, cost $12,000; masons, Hausehalter and Luehring; carpenters, Ramcke and Repsold. Also a two-story brick dwelling, 22 by 54 feet, for A. W. Johnson, at 733 West Twenty-second street, cost $5,800; mason, C. Linstrom; carpenters, P. Larson & Co.

Architects Holabard & Roche are building a Presbyterian church at South Evanston; frame, 54 by 42 feet, cost $8,000; contracts not let. Also a residence for John Neill, at 2963 Wabash avenue, brick, two stories and cellar, 25 by 70, cost $8,000; carpenter, J. C. Russell. For Mrs. Isabella Marten, a brick residence, two stories, attic and basement, 22 by 54 feet, cost $4,000; carpenter, Edwin Pildlick; masons, Meagher & Cameron.

Architects Radall & Patton (successors to Geo. P. Randall) have plans for a brick schoolhouse, 95 by 72 feet, eight rooms, at Sheboygan, Wis., cost $20,000; contracts not let. Also a brick addition to the Oak Park schoolhouse, 46 by 72 feet, cost $10,000; F. M. Ellis, contractor. Also a brick schoolhouse, four rooms, at Marion, Ohio, cost $9,000. Also an Episcopal church at Waverly, Iowa, brick, cost about $4,500.

Commissioner of Buildings Alexander Kirkland has planned for the city a $11,000 brick engine-house at 177 East Erie street, Thomas Courtney, builder.

Architect Greg. Vigeant is building the M. E. church on the corner of Western avenue and Monroe street; Anderson pressed brick; 91 by 108 feet, with tower or steeple 80 feet high. The body of the church is 64 by 50 feet. It contains a Sunday-school room, lecture room, auditorium and gallery; interior finished in hardwood; to cost about $30,000; Jas. Kelly, contractor. Also plans for a brick residence for Mr. Thomas Sennott, two stories and basement, 22 by 61 feet, on Loomis street near Harrison, cost $5,000; no contracts let. Also a brick store building, two stories, 57 by 80 feet, for Mrs. Clouthier, on Blue Island avenue and Laflin street. The upper story will be for flats; Jas. Kelly, contractor.

Mr. A. G. Beaudry with Mr. Vigeant has made plans for a residence for A. W. Blovin, at 9 Tompkins street, near McAllister place; two-story and cellar, brick, 22 by 42 feet, cost $2,000.

Architect Ed. Baumann is building two houses on Maple street east of La Salle for F. Campe; three stories and basement, with stone front, 67 by 46 feet, cost $11,000; Jno. Mountain, mason; carpenters, Mackey & Norfske; cut stone, E. Burkhart. Also a house for F. Woltz on East Indiana street, east of Wells, brick, three stories and basement, 25 by 71 feet, cost $8,500; mason, G. Eberlin; carpenters, Peterson and Paine.

Architect H. F. Starbuck is building a residence for D. S. Marsh, on Lake avenue. It is three stories and basement, faced with Anderson brick, and terra-cotta trimmings, 25 by 60 feet; cost $15,000; carpenter, John Workman. Also remodeling a residence for F. C. Smith, cashier of C. B. & Q. R. R. Also just started to build a block of department houses, on Calumet avenue, for Nelson Monroe, three stories, brick and terra-cotta trimmings, 60 by 70 feet; cost $15,000.

Architect L. G. Halberg is building for J. H. Smith, on Lincoln place, a residence of Anderson pressed brick, stone, with terra-cotta ornamentation, three stories and basement, 23 by 70 feet, containing fourteen rooms; cost $8,000. For A. W. Ring, at 446 Belden avenue, a residence of Anderson pressed brick, two stories, attic and cellar, 23 by 51 feet, with octagon bays on side and front, cost $6,500; mason, M. Otteson; carpenter, A. M. Mangson. For Aug. Warner, a residence, at 503 Dearborn avenue, Indiana pressed brick, with stone and terra-cotta trimmings, three stories and basement, 21 by 70 feet, containing twelve rooms, cost $10,000.

Architect O. Johnson has plans for a residence for J. M. Bishop, at Joliet, Ill., two-story frame building, with stone basement, Queen Anne style, 24 by 52 feet, cost $4,500. For H. J. Sawyer, at the same place, a frame cottage, 30 by 44 feet, cost $2,300. Also a house at Evanston for Mrs. S. L. Deshon, two and one-half stories, frame, 25 by 44 feet, cost $3,000; S. J. Hicks, contractor.

Architect F. W. Wolf is largely engaged in the building of breweries. He reports a brewery in New Orleans, one in New York, one at Bismarck, one at Yankton, one at Cleveland, Cincinnati, Allegany City, Indianapolis, and also extending Schlitz brewery at Milwaukee.

Architect J. F. Doerr has made plans for a block of stores and flats at the corner of Archer avenue and Butterfield street, for Henry Feid, to be erected by Gutrich Brothers. The structure will have a frontage of 104 feet on Archer avenue by 89 feet on Butterfield street, and will be three stories and basement in height. The front will be of Anderson pressed brick, trimmed with stone, and a galvanized iron cornice, cost $20,000.

Architect Rehwoldt has completed drawings for three two-story dwellings, to be erected for J. L. Stagg, at Nos. 152 to 158 Leavitt street. The fronts will be of Indiana brick, trimmed with sandstone, cost $18,000.

Architect Cass Chapman has planned for H. Byrne two residences, at Nos. 2628 and 2630 Wabash avenue. The fronts will be of greenstone trimmed with brown, cost $18,000.

Architect Ruehl is planning two three-story dwellings for Frank Honemichel, to be erected at Nos. 636 and 638 Blue Island avenue. The fronts will be of Anderson pressed brick, trimmed with terra cotta, cost $15,000.

Architect Fred Baumann is building a residence for Mr. Featherstone, on the corner of Washington and Wood streets, three stories and basement, 60 by 60 feet; Mr. McCormick, contractor. Also a dwelling-house for J. H. Smith, at 43 Lincoln place, to cost $10,000.

Cincinnati, O.—Architect Samuel Hannaford is to build a seven-story business block, 79 by 104 feet, for Mr. H. W. Derby, on the corner of Fourth and Elm streets, to cost $100,000.

The following building permits have been issued recently: Jas. M. Glenn, four-story brick dwelling, corner Sixth street and Broadway; S. Hannaford, architect; cost $10,000. Morris White, four-story brick dwelling, corner Court and Vine streets; cost $18,000. Baptist Church Congregation, corner Kemper Lane and McMillian street, cost $15,000. H. W. Derby, seven-story brick dwelling, corner Fourth and Elm streets, cost $40,000. Mike Joker, one-and-one-half-story brick dwelling, Mickens avenue cost $10,000. Lawrence Grace, two-story brick dwelling, corner Coleman and Dayton streets, cost $7,000. J. B. Washburn, three-story brick dwelling, corner Blue Rock and Terrel streets, cost $9,000. F. Wibbelman, three-story brick dwelling, corner Liberty and Cutter streets, for Catholic Church, cost $9,900. Jas. Oker, four-story brick dwelling, 735 Central avenue, cost $8,000. A. B. Ritterman, two-and-one-half-story brick dwelling, corner Ohio avenue and Calhoun streets, cost $6,000. J. H. Thowar, three-story brick dwelling, 472 George street, cost $5,000. John Kilgour, three-story brick dwelling, corner Hatch street and Observatory road, cost $6,000. A. H. Hosenmeyer, three-and-one-half-story brick dwelling, Mulberry street, cost $5,400. H. Wrigman, three-story brick dwelling, Dandridge street, cost $5,500. James Louer, two-story brick dwelling, corner Cutter and Lime streets, cost $5,000. Jos. Ausdermore, two-story brick dwelling, 253 Browne street, cost $5,000. St. Anthony's Church, one-story brick school, corner Budd and Carr streets, cost $5,000.

Cleveland, O.—The First Presbyterian Church, of this city, which is now in the process of rebuilding, will, when completed, present a different appearance on the interior than it did before the fire. Instead of being one of the darkest churches in the city, as heretofore, the architects have made novel arrangements whereby the church interior will be bright and elegant. The entire seating arrangement has been altered, the middle aisle having been abolished, and two side aisles substituted. The stairway in the tower which leads to the gallery has also been removed and placed in the church proper. The gallery, instead of extending the full length of the nave, has been cut off about two-thirds of the way toward the pulpit, and that portion over the entrance has been swung around in a circle to meet the two side galleries. The two towers will be utilized for ventilating purposes. The roof has been entirely taken off and an open timber roof with a barrel vaulted ceiling substituted in its place. Skylights of beautifully colored glass will increase the light in the church at least threefold. One of the main features of the improvements, however, will be the chancel. It is to be built of oak with three elegantly carved stationary chairs with high gabled backs, forming a base for a carved oaken screen, twenty-eight feet high, surmounted with a traceried gable, the screen itself being inclosed in the chancel arch, which is to be decorated in exquisite frescoing in keeping with the design. The entire work will be completed by September 1.

Architects Eisenmann & Blunt report: For the Board of Education, the Waverly street school building, the Standard street school building, and the Sibley street school building, each are 138 by 83 feet, have twelve rooms, and cost $35,000; all under way. Bids have just been received for the Clark avenue and Kinsman street buildings; they are to be the same as the above mentioned. The board have advertised for bids on the Sumner street building, to be the same, and cost the same as each of the above.

Dallas, Tex.—Architect J. E. Flanders reports present condition and outlook good; at present engaged upon the following work: For Shackelford county, Tex., a stone courthouse, three stories, 60 by 80 feet, metallic shingle roof, galvanized iron cornice, cost $45,000; under way. For Stephens county, a three-story stone courthouse, 62 by 82 feet, cost $35,000; under way. For Eastland county, a three-story stone courthouse, 62 by 82 feet, cost $40,000; putting on roof. For Dallas county, a record building, 25 by 54 feet, two-story brick and stone, iron roof, cost $17,000; under way. For Ellis county, a record building, 55 by 62 feet, two stories, brick and stone construction, iron roof, cost $14,000; contracts not let. For Kaufman county, a two-story jail building, 55 by 62 feet, cost $30,000. Merchants' Exchange building, two fronts of St. Louis pressed brick and stone trimmings, three-story and basement, 65 by 90 feet, cost $50,000; nearly completed. Grand Windsor Hotel, W. E. Hughes owner, a stone building, 100 by 200 feet, four stories high, cost $90,000; nearly completed. For Mr. F. H. Cockrell, a two-story brick business block, 75 by 200 feet, to cost $20,000; under way. For Messrs. Murphy and Bolmz, a three-story brick business block, 25 by 90 feet, cost $10,000; under way. For Mr. W. H. Young, a two-story frame residence, 44 by 68 feet, cost $5,000; under way. For Mr. W. J. Mahoney, a one-story frame cottage, 36 by 44 feet, to cost $2,000; under way.

Denver, Colo.—Architect E. P. Brink reports: For the Alkire estate, a two-story brick residence, 45 by 64 feet, also a barn, cost $10,000; under way. For Mrs. A. L. Fisher, a two-story brick residence, 25 by 50 feet, cost $5,000. For Mrs. Mary Walthers, a two-story brick residence, 32 by 70 feet, to cost $6,500. For Oddfellows, a hall at Longmont, Colo., two-story brick, 25 by 80 feet, cost $8,000; under way. For George Charpiots, three stores and apartment house, two stories, 50 by 125 feet, cost $18,000; under way; C. W. Abbott, builder. For C. J. Hughes, a two-story residence, 34 by 74 feet, to cost $6,000; preparing plans. For Gen'l Bela. M. and A. S. Hughes, a block of stores and offices, 62 by 75 feet, two-story brick, cost $15,000; projected.

Emporia, Kans.—Architect C. W. Squires is preparing plans for a schoolhouse to be erected at Burrton, Kans., at a cost of $10,000; also for a residence for Mr. D. G. Thrall, at Eureka, Kans., to cost about $3,000.

Architect Heidrick is preparing plans for a dwelling-house to be erected on the Poorman Farm, just west of Emporia, to cost about $4,000.

It is said that Messrs. Baird Bros. will soon erect a fine business block on the corner of Merchants street and Sixth avenue.

The new Evangelical church is rapidly approaching completion, and will be dedicated August 10, upon which occasion Bishop R. Dubbs, of Cleveland, O., will officiate. Contractor Sprague has just finished extensive reparing of the Jay Block.

Frankfort, Ind.—Architect J. W. Hammond reports present condition and outlook good. The following buildings are now under way: First ward schoolhouse, brick and stone construction, to cost $8,000; U. M. Palmer, builder. For G. Q. Goodwin, a store building, 22 by 74 feet, of brick and iron construction, cost $3,000. For Mr. Geo. Dinwiddle, a two-story frame dwelling, 35 by 57 feet, cost $3,500. For Mr. J. K. Steele, a frame dwelling, to cost $3,500. For Mr. Seigfreid, a frame cottage, to cost $1,500; Dale Norris, builder. Also repairing the M. E. Church at Colfax, Ind., brick, 40 by 60, to cost $1,000; under way.

Grand Rapids, Mich.—Architect D. S. Hopkins has the following work in progress: At Muskegon, Mich., for the Muskegon Furniture Co., a brick block to cost $8,000. Also brick block with hall for I.O.O.F., to cost $12,000. A frame block of five two-story tenements for Mr. A. H. Wood, to cost $6,000. A frame dwelling for Mr. A. C. Truesdal, to cost $3,500 A frame dwelling for Mr. H. Haas, to cost $2,500. At Goshen, Ind., a frame residence for Mr. D. H. Hawks, to cost $3,000. At Ft. Wayne, Ind., a frame dwelling for Mr. J. A. Schoaff, to cost about $4,000. At Peoria, Ill., a frame residence for Mr. N. G. Moore, to cost $4,000.

Hastings, Neb.—Architect C. C. Rittenhouse reports: Present condition good, prospect for future very promising; doubtless there will be a great deal of country work done this fall. A two-story frame dwelling, 34 by 52 feet, to cost $5,000, for Mr. J. B. Webster; now under way. For Hon. R. A. Batty, a two-story frame residence, 30 by 46 feet, to cost $4,000; under way. For Hastings Opera House Co. and Wm. Kerr, a three-story Opera House and bank building, 67 by 120 feet, to cost $45,000; under way; Ellis & Hubbard and Sam Chancey, builders. Frahm Bros., a two-story store and office building, 22 by 60 feet, to cost $4,500; under way; Scales & Clark, builders. For D. Sowman & Son, a two-story office building, 22 by 56 feet, to cost $5,000; projected. Hastings College, a three-story dormitory, 70 by 81 feet, to cost $20,000; under way. For Rev. J. L. Lower, a two-story frame residence, 30 by 36 feet, to cost $2,200; under way. For Rev. Mr. Powell, a two-story frame residence, 24 by 32 feet, to cost $1,600; complete. All the above are at Hastings. At Plum Creek, Neb., a two-story brick school building, 68 by 74 feet, to cost $11,500; not contracted. At Wahoo, Neb., a three-story brick school building, 70 by 74 feet, to cost $14,000; under way. At Minden, Neb., a frame church building, 32 by 42, for the Presbyterian Society, to cost $2,800; not contracted. At Arapahoe, Neb., a two-story brick school building, 48 by 62 feet, to cost $7,600; not contracted. At Grand Island, Neb., a two-story four-room addition to schoolhouse, 45 by 49 feet, to cost $7,600; under way; J. D. Purdy, contractor.

Indianapolis, Ind.—Architect E. H. Kecham reports: For Mr. Frank H. Blackledge, a two-story dwelling, 32 by 52 feet, to cost $2,500; under way. For Mr. J. J. Turner, a residence, 30 by 57 feet, first story of stone, second of tile and terra cotta, to cost $6,000; under way. For Mr. O. J. Morris, a two-story frame dwelling, 30 by 42 feet, to cost $2,000; under way. For Mr. Wm. Houeisen, a brick business block, 50 by 50 feet, to cost $6,000; under way. For Mr. Fred. La Fever, a one-story cottage, 28 by 40 feet, to cost $1,600; under way. Also a church at Richmond, Ind., 25 by 50 feet, to cost $4,000.

Kansas City, Mo.—Architect L. L. Levering reports: "Quite a number of buildings spoken for to be erected in the fall, also some for next spring. Temporary lull in building just now, which might still be considered as *great activity* in some cities." Nearly completed for Mr. Wm. Budd, a double two-story brick, 47 by 52 feet, with fourteen rooms, cost $4,700. For G. M. White, a two-story eight-room brick residence, to cost $4,200; under way. Also Christian Church at Marshall, Mo., brick with stone trimmings, basement and gallery, with "dish" floors; the whole structure will be 50 by 56 feet, will have two spires, cost $20,000; under way.

La Harpe, Ill.—Architect W. L. Ross reports: For Judge Elting & Co., at Scotia, Ill., a one-story frame building, 48 by 70, to be used as a general store building, about finished, cost $2,500; Ross & McAllister, contractors.

Laramie, Wyo. Ter.—Architect W. A. McKenzie reports: Times are dull here. The depressed condition of Union Pacific interests affects us very much, as they have lately discharged three hundred hands here. The population of Laramie is now 4,000.

Architect J. T. Holliday has planned for Trabing Bros. a large warehouse, 50 by 96 feet, two stories and basement; it will be of brick and iron construction, interior plastered throughout, and furnished with gas, water, heating and sewerage pipes. The contract has been let to Hon. W. H. Holliday for $13,000.

Logansport, Ind.—Architect J. E. Crain reports: Outlook favorable. Houses ranging from $800 to $1,500 are being built in all parts of the city, and are in great demand. Work has commenced on the Insane Asylum here, which will cost $285,000. The following buildings are now under way: For Miss C. M. Orr, a two-story brick residence, 36 by 66 feet, to cost $6,500; J. E. Crain, builder. For Mr. P. H. McGreevy, a two-story frame residence, 30 by 52 feet, to cost $1,600; John Isert, builder. For Mr. Amos Keefort, a two-story brick residence, 32 by 51 feet, to cost $2,500. For Mr. J. B. Forgy, a two-story frame residence, 42 by 61 feet, to cost $6,700. Parsonage Baptist church, two-story, brick, 32 by 48 feet, to cost $2,800. For Mr. M. R. Frazer, a two-story brick residence, 33 by 68, to cost $5,500. For Dr. J. H. Shults, a three-story office building, 20 by 82 feet, to cost $4,000. For Mr. F. Bugman, a two-story business block, 23 by 70 feet, to cost about $3,500; J. E. Crain, builder. For Mr. J. D. Furgison, a three-story business block, 48 by 106 feet, to cost $16,500. For Mr. Andrew Prescott, a two-story frame dwelling, 32 by 46 feet, to cost about $1,400. For Mr. Benj. Pittman, a two-story dwelling, 29 by 42 feet, to cost $1,250. For Sarah S. Worstal, a two-story frame dwelling, 32 by 53 feet, to cost $1,600. For Dr. A. H. Landes, a two-story frame dwelling, 34 by 42 feet, to cost $1,800. For Mr. Wm. Graffice, a two-story frame dwelling, 22 by 38 feet, to cost $1,400. Also a two-story brick residence projected for Mr. F. M. Harwood; it is to be 31 by 53 feet, and cost $2,800.

Minneapolis, Minn.—John Dunwoody is to build a double tenement on Fourteenth street between Nicollet avenue and Vine place, to cost about $10,000. J. C. Gale will probably commence the work of building a residence on his lots in Yale Park, soon after his return from his European trip. H. F. Spooner is to build a residence on Vine place, between Grant and Fourteenth streets, after the general style of Mr. Burnett's residence on Chicago avenue, to cost $6,000. Work has been commenced on the round-house, shed, elevator and other buildings being erected for the St. Paul & Northern Pacific. The walls of the baggage room for the union depot near the suspension bridge are also being put up. J. A. Ridgway is to commence the erection of a handsome residence on Nicollet avenue and Thirty-eighth street. The new street-car barns built on the fair grounds are endorsed. They have been built with reference to an extension through the fair grounds property, when it shall be abandoned for its present uses and platted. Samuel Adams is building a double house of twenty rooms, to cost $7,000, on Fourteenth avenue south, between Fifteenth and Sixteenth streets. The new elevator, A No. 2, is going up at the rate of two feet a day. One hundred and eighty men are employed upon it. The Moffitt-Johnson block on Western avenue is being rebuilt. The walls are up to the second story, and they are built to stay this time. The transfers for the first six months of the year show a trade in realty exceeding $12,000,000.

Architect C. F. Struck is the architect of the Harmonia block reported last month.

Building permits have been issued as follows: Augsberg Seminary, three-story wooden dormitory of twenty-four rooms, west side Twenty-second avenue, between Seventh and Eighth streets south, cost $5,000. E. Tolefson, two-story, eleven rooms, wooden dwelling, Eleventh avenue south and Ninth street, cost $3,500. Same owner, two-story, ten rooms, wooden dwelling, Fourteenth avenue and Fourteenth street south, cost $1,800. Same owner, two-story, twelve rooms, wooden dwelling, Fifteenth avenue and Fourteenth street south, cost $3,000. Same owner, two-story, ten rooms, wooden dwelling, Reverside avenue and Fourth street south, cost $1,800. Peter Peterson, two-story, seven rooms, wooden dwelling, 2614 Seventeenth avenue south, cost $1,500. J. Miner, two-story, twelve rooms, wooden dwelling, Twenty-second avenue, between Lake and Thirty-first street, cost $3,250. Charles W. Oehler, one-and-one-half-story, seven rooms, wooden dwelling, southeast corner Tenth street and Seventeenth avenue north, cost $2,000. John Kelly, two-story, wooden, double dwelling, six rooms each, north side of Eighth avenue northeast, between Second and Third streets, cost $3,500. Mrs. S. J. Williams, two-story, ten rooms, wooden dwelling, Stevens avenue corner Fifteenth street south, cost $4,000. J. S. Bell, two-story, eleven rooms, brick-veneered dwelling and brick-veneered barn, southeast corner Park avenue and Fourteenth street, cost dwelling $20,000, barn $1,500; $21,500. Leland & Crocker, fire-limit permit, a brick skating rink at corner First avenue south and Sixth street, cost $19,500. J. S. Kingman, same kind of structure on North side of Second avenue south, between Franklin and Twenty-second street, cost $3,500. City of Minneapolis, two-story brick engine-house on north side of Blaisdell avenue and Twenty-eighth street, cost $9,154. Mrs. Clara Gardener, two-story wooden stone-front dwelling, south side Seventh street, between Eighth and Ninth avenues south-east, estimated cost $2,200.

Marseilles, Ill.—Architect A. W. Allen reports building business good; all mechanics are busy at good wages. The following buildings are now under way: For Mr. Freemont Carr, a two-story frame dwelling, 32 by 30 feet, to cost $2,800; Isaac Gage & Co., builders. For Mr. Edwin T. Reed, a two-story frame dwelling, 40 by 46 feet, to cost $3,000; Edwin Allen, builder. For Mr. Martin Armstrong, a two-story frame dwelling, 24 by 30 feet, to cost $1,500.

Neillsville, Wis.—Architect C. B. Bradshaw reports present state of building trade is fair, and outlook favorable. The following buildings are under way and projected: For Mr. Dewhurst, a two-story frame store building, 33 by 75 feet, veneered with brick; cost $4,000; under way. For Mr. E. Eilert, a two-story frame brewery, 40 by 75 feet, veneered with 8-inch brick wall; cost $12,000; projected. For Mr. H. Schuster, a two-story frame dwelling, to cost $2,000; under way. For Mr. Thos. Kerns, a two-story frame dwelling, 34 by 50 feet; cost $3,000; under way. A Catholic Parsonage frame building, brick veneered, 30 by 60 feet; cost $3,800; under way. For Mr. W. S. Covill, a two-story frame dwelling, 30 by 36 feet; cost $2,700; projected. For Mr. Jas. L. Gates, a one-story brick warehouse, 17 by 50 feet; cost $1,000; projected.

New Ulm, Minn.—Architect J. Brendt reports: A public school building two-story and basement, 80 by 75 feet, to be built of Mankato white brick; cost $20,000; under way. For Mr. C. Dahne, a two-story and basement brick dwelling, 36 by 30 feet, to cost $3,000; under way. A Lutheran college building, 80 by 40 feet, two-story brick, with stone basement and mansard roof; cost $18,000; under way. Also two-story cottage, 20 by 30 feet, for Mr. D. Morry, to cost $1,800; under way.

North Springfield, Mo.—Architect S. B. Abbott reports building outlook good, has a number of buildings on hand, among which is a three-story and basement hotel, for the Ozark Hotel Co. It is to be constructed of brick and stone, with Mullion finish and cut-stone trimmings, galvanized iron cornice. The building is 100 by 138 feet, with a large court; contracts all let and work under way; to cost $45,000.

Ottumwa, Ia.—Architect Edward Clark reports: For Rev. F. J. Ward, a parsonage, 26 by 36 feet, of brick, stone and iron construction, two stories, nine rooms; cost $2,400; under way. For J. B. Field, a single tenement house, two stories, seven rooms, frame, with stone foundations; cost $1,800; under way.

Peoria, Ill.—Architect S. G. Whitford reports business very dull, brick selling at $5 per thousand and no demand. The following work is from his office this season: For Kingman & Co., a five-story brick block, 60 by 140 feet, cost $25,000; completed; Wm. Shroder, builder. For the Transfer Co., a four story business block, 60 by 140 feet, cost $20,000; completed. For Calvary Mission, a two-story Sunday-school building, 60 by 86 feet, to cost $12,000; completed. For Mr. Philip Zell, a two-story frame residence, 38 by 50 feet, cost $12,000; completed. For Mrs. Mahlow, a frame residence, cost $6,000. For J. A. Merser, a frame residence to cost $3,500; under contract. For Town of Bradley, a three-story brick building, 40 by 65 feet, to be used as a home for aged women, cost $12,000; John Flinn, builder. For Mr. Wm. Dixon, a two-story frame dwelling, 26 by 50 feet, cost $4,000. For Mrs. M. Lathrop, three two-story frame tenements, 66 by 85 feet, to cost $10,000. For Mr. John Flinn, a two-story frame dwelling with slate roof, 24 by 45 feet, to cost $4,000; under way. For Mr. Jas. Beamblo, a two-story frame dwelliug, 22 by 36 feet, cost $3,000; not yet commenced. For Mr. Wm. Shroder, a double house, two stories high, 42 by 60 feet, cost $6,000. For The Peoria Starch Company, a bonded warehouse, 60 by 60 feet, cost $4,000; completed. For Mr. L. Sweetsen, a two-story frame dwelling, 26 by 36 feet, cost $1,750; not contracted. For Mrs. H. Holman, a frame dwelling, 38 by 50 feet, to cost $8,000; not contracted.

Peru, Ind.—Architect S. R. Berry reports there are a number of buildings being erected, and everything looks favorable. The most important work Mr. Berry has on hand is an Opera House for Messrs. Smith & George. The building will be 52 by 132 feet, with stores and offices in front, auditorium on the ground floor, with seating capacity of one thousand; cost $20,000.

Seneca, Mo.—Architect H. C. Miller reports building outlook good at present, but some fears are entertained that the corn crop will be a failure in this section. Wheat harvest is over and fair crops reported. With a fair amount of rain corn will improve, and building will boom this fall. Mr. Miller has the following work under way: For Mr. J. G. McGanon, a two-story brick building, 50 by 100 feet, cost not estimated: For Mrs. Hick, a two-story brick building, 25 by 100 feet, to cost $2,500. For Mr. Wm. Cary, a two-story frame dwelling, 28 by 28 feet. Also a number of small cottages.

Sioux City, Iowa.—Architects Corry & Martin report: For Mr. Jno. Pierce, a four-story brick and stone store building, 75 by 20 feet, to cost $4,000; under way. For Mr. J. R. Munday, a two-story and basement brick business block, 22 by 75 feet, to cost $5,400; under way. For Water Works Company, a one-story brick engine-house, 40 by 80 feet, to cost $7,500; under way. At Pipestone, Minn., a frame residence for Mr. F. Close, to cost $5,300; projected. A frame residence for Mrs. Humble, cost $2,000; under way. For Close Bros., brick addition to hotel building, cost $14,000; under way; A. Halseth, builder. For a syndicate, a two-story stone block, 60 by 73 feet, to cost $17,000; under way. For Black & Co., a two-story stone business block, 122 by 75 feet, cost $26,000; under way; A. Halseth, builder. At Hubbard, Neb., a frame chapel, 24 by 50 feet, to cost $1,200; projected. At Lemars, Ia., frame residences for Mr. G. A. Samins and Mr. P. H. Deal, to cost $3,000 each; under way. Also a frame residence for Mr. H. P. Cornish, at Cherokee, Kan., to cost $2,000; projected. For Moris Pierce, a frame residence, to cost about $3,000; under way. For Mr. G. S. Stephens, a frame residence, to cost $4,300; under way. For Mr. Fawcett, a frame residence, to cost $4,000; under way.

St. Louis, Mo.—A movement is on foot to form a stock company for the purpose of building a large and handsome building to be used as a riding school for ladies and children. At a meeting of a number of prominent citizens, a committee, consisting of Messrs. Bell, Cole, Niedringhaus and Whittaker, was appointed by the chairman, Gen. Sherman, to solicit subscriptions to defray the expense of the building, which is estimated at about $15,000. A novel and interesting feature of the proposed academy will be the organization of a cadet cavalry corps, to which boys of from ten to sixteen years will be eligible. The stock will be limited, only enough being issued to suffice for the erection of the building. The school will be used for riding purposes exclusively. A New York institution of this class is run with great success, and it is proposed to conduct this one upon the same principle.

Architect Thos. Furlong has a row of five houses on Carr avenue, between Twenty-second and Twenty-third, for Hon. W. Kernon, of England. They will be tenement flats and cost about $1,000 each.

Architect James McGrath has commenced the erection of a residence house for John W. McCullagh, Esq., on West Pine street. The frontage of the ground is 50 feet, and the building and the ground together will cost about $13,000.

Architect A. A. Cook, the superintendent of the construction of the First Congregational Church, on Delmar near Grand avenue, reports progress satisfactory. The building is now so far advanced that they are raising the roof. All of the contracts have been let with the exception of the frescoing. Hayney, Spencer & Co., of Richmond, Ind., have the contract for the pew furnishing, which, in the body of the church, will amount to about $1,400. The church will, it is expected, be ready for service on the 1st of January next. The building is a handsome stone structure, and will cost about $80,000.

Permits for the following buildings (with the exception of the work of architect Hyatt) have been issued since June 24.

Architect E. Mortimer has the following new work in hand: For Unity Church, a one-story addition to chapel, on Armstrong avenue, between Park and Carlyle streets, to cost $4,000; Mr. Bonsack, contractor. For the St. Louis Mutual House Building Co., on east side Bacon street, near N. Market, a two-story seven-room dwelling, to cost $3,200; J. V. Majors, contractor. For same company, on the south side of Stoddard street, near Glasgow, a two-story seven-room dwelling, to cost $3,500; M. B. Scanlon, contractor.

Architect Chas. K. Ramsey: For Mr. W. P. Mullen, on Dayton street, a two-story ten-room house, to cost $9,000. For Miss H. W. Hudson, on Finney avenue and Krum street, a two-story eight-room dwelling, cost $6,000. For himself, a two-story six-room frame dwelling, on the south side of Maple street near Beach, to cost $2,000.

Architect Chas. F. May: For Caroline Hoelmer, on east side of Davis street, between Fifteenth and Sixteenth streets, two three-story six-room dwellings, to cost $3,500. For Mr. F. W. Towegge, on North Market street, a two-story six-room dwelling, to cost $3,000.

Architect Jos. Stander: For Mr. A. Henrich, on Cherokee street, a two-story six-room dwelling, to cost $1,400. For Mr. M. Borsing, two two-story houses, twelve rooms, on Cherokee street, to cost $3,200.

Architect C. E. Illsley: For Mr. James Layton, a two-story eight-room dwelling, to cost $5,700.

Architect and contractor J. J. Heffner: For Dr. Garcia, on Choutean avenue and Thirteenth street, three two-story dwellings, seven rooms each, cost $13,000; and one two-story dwelling, eight rooms, to cost $2,000.

Architect E. Jungenfeld: For Philip Bardenhimer, six two-story six-room houses, to cost $15,000. For the Anheuser-Busch Brewing Co., a five-story malthouse, to cost $40,000.

Architects Aug. Beinck & Co.: For Chas. Oslerman, on Cass avenue, a two-story dwelling, seven rooms, cost $2,000. For J. B. Rublemann, two two-story and mansard dwellings, eight rooms each, cost $6,000. For Messrs. Hampter and Eckhoff, on Eleventh street, a three-story furniture factory building, to cost $7,000. For the St. Louis Stamping Co., a four-story factory building on Main street, to cost $7,000.

Architect H. E. Peiper: For Mr. W. Koopmann, two two-story and mansard roof residences, nine rooms each, cost $5,600; Reimmers & Thompson, contractors.

Architects Geo. I. Barnett & Co.: For Mr. Knox, on Fifth street, near Morgan, alterations in Nugent's store, cost about $5,000.

Architects P. F. Meagher & Son: For Mrs. T. Dodd, on Market street, two two-story six-room dwellings, cost $5,000.

Architect A. P. Hyatt has just completed an elegant suite of rooms in the Armory building for Company E, Third Regiment, at a cost of $1,200. Is also adding one story to E. H. Kemper's building, at East St. Louis. This work will be completed about September 1; cost about $2,500.

Architects John W. Barnes & Co., are about to erect on School street a two-story six-room dwelling for Mr. John I. Dozier, to cost $3,800.

Architect O. P. Koenig has taken out a permit to build a two-story six-room house, on Sheridan street, for Mr. Fred Keil, to cost $2,700. For Hy. Stoor, two two-story six-room dwellings on Glasgow avenue, cost $7,000.

A permit was issued to the Murphy Varnish Company for the erection of a four-story warehouse, to cost $20,000; contracts sub-let.

Architect A. L. Miller: For Mr. Frank McMahon, a two-story ten-room dwelling, to cost $5,000; Thos. Roache, contractor.

Architect I. S. Taylor has taken out a permit to build two two-story dwelling-houses, six rooms each, for Marie E. Green, on Grand avenue, to cost $5,000; W. Green, contractor.

Architect H. E. Pieper: For Mr. M. Berker, a two-story five-room house, to cost $3,000; J. Keefe, builder.

Architect Paul Hersch: For Mr. Herman Konert, two two-story dwelling-houses, eight rooms each, cost $6,200.

Architect H. Brinkmeyer: For Elizabeth Lang, three two-story and mansard dwellings on Cass avenue, to cost $8,200; H. Heitman, builder.

Architect Johnson: For Mr. Geo. Kohrman, a three-story and mansard dwelling, seventeen rooms, on the corner of Arsenal and Columbus streets, to cost $5,800.

Architect J. V. Majors: For Adeline M. Loehr, a two-story six-room dwelling, cost $2,700. For Messrs. Wilson & McNairy, two two-story and mansard dwellings, nine rooms each, on east side of Coleman street near North Market, cost $6,700. The architect is the contractor of both the above.

Architect T. H. Torrence: For Mary A. Walsh, on Salisbury street, a two-story and mansard dwelling, thirteen rooms, cost $4,000. The architect is the contractor.

The St. Louis Gas Light Company have taken out a permit to build a two-story purifying room on Second street, to cost $7,000; contracts sub-let.

E. C. Robbins has taken out a permit to build a two-story eight-room residence, to cost $6,000; contract sub-let.

Architect B. Koester: For Mr. H. Dierkes, two two-story and mansard dwellings, eleven rooms, on the corner of Nebraska and Keokuk streets, cost $4,500; R. Rolfus, builder.

Architects J. B. Lindsay & Son, for Mr. E. C. Lindsay, on North Market street, a two-story seven-room house, to cost $3,000. The architects are the contractors.

Contractor J. Herman is building for himself, on Missouri avenue, a two-story and mansard dwelling, eight rooms, cost $4,500.

Contractor Theo. Kohnen is building for himself, on Eleventh street, a three-story nine-room house, cost $2,000.

F. G. Gorman, contractor, is building for Chas. Hess, a two-story nine-room house, cost $4,000.

Jos. Reith is building for himself a two-story ten-room dwelling, cost $4,000.

A. Bollinger: For himself, a two-story seven-room dwelling, cost $3,000.

Contractor D. Faugmann: For Mr. Chris. Zeiner, four two-story dwelling-houses, six rooms each, cost $6,000.

Ed. Thomssen is building for Michael Foerstrel, a two-story twelve-room dwelling, cost $4,000.

St. Paul, Minn.—Building permits have been issued as follows: A. R. Kiefer, one-story double frame store, 40 by 48 feet, on the north side of Minnehaha street, between Mendota and Arcade streets, cost $2,490. William C. Cunningham, three-story brick printing-office, 25 by 85 feet, on the south side of Fourth street, between St. Peter and Wabasha streets, cost $7,000. Moritz Watter, two-story brick veneered double dwelling, 44 by 64 feet, on the southeast side of Pleasant avenue, between Third and Chestnut streets, cost $5,500. Walter Mann, alteration of the three-story stone building on the southeast corner of Robert and Third streets, cost $3,000. Greenleaf Clark, three-story brick block of dwellings, 60 by 52 feet, on the corner of Fifth and Oak streets, cost $12,500. Jacob Arnold, two-story frame dwelling, 22 by 48 feet, on the north side of Ellen street, between Kent and Mackubin streets, cost $3,000. H. P. Hall, four-story brick printing-office, 25 by 100 feet, on the south side of Fourth street, between Wabasha and St. Peter streets, cost $12,000. J. H. Broome, two-story brick-veneered store and dwelling, 22 by 65 feet, on the north side of Martin street, between Rice and St. Peter streets, cost $4,500.

Toledo, O.—The contract for the asylum has been awarded to M. J. Malone & Co. for about $400,000. Mr. James Winans, civil engineer and superintendent, has been retained to take charge of the entire work.

Architects Gibbs & Co. are building a block of two-story brick and frame tenement houses, on Superior street, for Mr. Hubbarb, to cost $7,000.

Architect N. B. Bacon, for J. D. Ford, a two-story frame dwelling, cost $5,000; J. Hales, builder. For Mr. S. C. Schenck, a two-story brick dwelling, to cost $16,000; A. Bently, builder. For Mr. John Winfield, a two-story frame dwelling, cost $2,700. For Mr. R. Geysel, a two-story frame dwelling, to cost $2,500. For Messrs. Jno. R. & Fred Boier, two two-story brick dwellings, cost $8,000; John Valentine, builder. For Mr. P. H. Berdan, a double two-story brick dwelling on Madison street, to cost $11,000; J. B. Hassett, builder.

Solomon Spear & Sons are building for S. Spear a two-story brick dwelling, to cost $6,000.

Messrs. Miles & Horn are building for themselves a one-story brick office-building; cost, $3,000.

Architect A. Liebold, for Mr. Mack, a two-story brick dwelling on Madison street, cost $6,000; Carl Schmul, builder.

J. S. Vanfleet is building for Messrs. Rayneer & Seagrave, a block of five brick dwellings, two-story and cellar, cost $14,000.

Architect L. Welker, for Mr. Webber, a two-story and basement brick dwelling, cost $5,000.

Topeka, Kan.—Architects Haskell & Wood report: Entire State booming, with immense crops, Republicanism, Prohibition, etc. We notice that Parker & Kreuger are credited as the architects of Salina, Kas., college. They are the contractors on the building. We are the architects, and have charge of the work. Will soon let contracts for College of Emporia, a Presbyterian college, to cost $60,000, reported some time ago. Also have on hand a jail for city of Newton, Kas., to cost $7,000. A city hall and enginehouse for city of Newton, to cost $10,000. For Hutchinson, Kas., national bank, a three-story stone building, to cost about $12,000. For James King, Esq., Topeka, residence, to cost $6,000. Indian school building at Devil's Lake, Dak., to cost $18,000. Academy at Hesper, Kan., to cost $5,200. Schoolhouse, District 83, Shawnee county, Kas., to cost $3,000. Schoolhouse at Neodosha, Kas., to cost $3,200. A residence for Mr. G. Grovenor, at Lawrence, Kas., to cost $3,700.

Architect H. M. Hadley reports: Business still "booming." Plans in office for one-story frame, 35 by 50 feet, for Mr. Geo. C. Moser, to cost $2,000. For Mr. James Hagerman, a two-story frame, 50 by 80 feet, veneered with brick, to cost $7,500. For Mr. J. K. Hudson, a block of stores, 75 by 175 feet, brick and stone construction, cost not estimated. For Messrs. Will Brown and S. H. Butler, at Fall River, Kas., a two-story store and bank building, 27 by 75 feet, to cost $5,000. For Mr. Jos. Block, at Detroit, Mich., a two-story business block, stone, 25 by 70 feet, cost $4,400. For Miss L. Thomas, a two-story frame residence, 38 by 48 feet, veneered with brick, to cost $3,700. Also addition to residence for Mr. J. C. Waters, to cost $1,020.

Architect C. B. Hopkins reports business has been very good so far, and prospects good for this fall. He has the following work on hand: For Col. Dennis, State librarian, a two-story frame dwelling, 40 by 65 feet, to cost $10,000; under way For Mrs. Adams, a two-story frame dwelling, 40 by 50 feet, cost $5,000; just completed. For Rev. Lewis Bodwell, a block of four brick stores and tenements, 90 by 40 feet, to cost $16,000; under way. For Mrs. Ritchie, a stone store building, 25 by 80 feet, cost $4,200; just completed. For Washburn college, a two-story and basement dormitory, 52 by 100 feet, to be built of brick, cost $16,000; projected For city of Topeka, a two-story brick schoolhouse, 40 by 75 feet, to cost $6,000; projected. For Mrs. McCampbell, a two-story frame cottage, 34 by 40 feet, to cost $2,500; projected. For Mrs. Jones, a two-story brick addition, 20 by 40 feet, cost $2,500; projected. The above are all in Topeka. Also the following work in Minneapolis, Kas.: For Mr. Simonds, a block of three stores, two stories, 25 by 80 feet, to cost $12,000; projected. For Mr. Campbell, a two-story frame building, 40 by 60 feet, to cost $6,000; projected. For Mr. Mason, a two-story frame house, 35 by 50 feet, cost $4,000; under way. For Mr. Smith, a two-story frame house, 35 by 45 feet, cost $3,200; under way. For Mr. Priplett, a two-story frame house, 35 by 45 feet, to cost $3,000; projected. For Mr. Garver Saling, a two-story frame house, 40 by 65 feet, to cost $9,000; projected.

Wahoo, Neb.—Architect J. F. Patterson reports present condition not good, but prospects of lots of building in the fall, especially among the farmers, as they have the best crops they ever had. The following work is under way: For school section 39, a two-story and basement brick school building, 75 by 36 feet, cost $16,675. For Mr. Henry Anderson, a two-story frame dwelling, 66 by 49 feet, cost $6,200. For Mr. W. H. Dickinson, a three-story brick hotel, 22 by 50 feet, cost $3,000. For Mr. E. E. Lyle, a brick bank building, 22 by 44 feet, cost $7,000. A Presbyterian church, frame, with brick foundation, 32 by 54 feet, cost $3,000. Also twenty-five or thirty other buildings, ranging in price from $500 to $2,500.

Youngstown, O.—Architect C. H. Owsley reports the following buildings in course of erection: For Mr. James Parmelee, a three-story brick and stone store building, 45 by 80 feet, to cost $15,000; Thos. Connell, builder. For Mr. C. S. Bissell, a three-story brick and stone building, 42 by 80 feet, to cost $14,000; Thos. Connell, builder. For Mrs. Mary Muldoon, a two-story brick and stone store building, 44 by 75 feet, to cost $8,000; Thos. Connell, builder. For Mr. Wm. Murdock, a two-story brick and stone store building, 25 by 75 feet, to cost $5,500. For Mr. U. A. Andrews, brick and stone residence, to cost $10,000. For Mr. I. Kirk, at Warren, O., a brick and stone residence, to cost $8,000; contract not let.

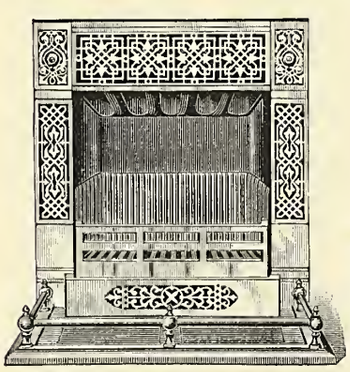
Zanesville, O.—Architect H. C. Lindsay reports building very dull at present, but outlook good for fall work. Quite a number of buildings talked of, among them a large steam mill. Mr. Lindsay has the following work on hand, for city of Zanesville: A workhouse, two-story, brick, 76 by 112 feet, to cost $20,000; T. B. Townsend, builder. A cemetery vault and chapel, of stone and pressed brick, 30 by 30 feet, cost $5,500. For W. S. Bell, a three-story store building, of pressed brick and stone, 22 by 100 feet, to cost $4,500; under way; Evans & Son, builders. For Mr. L. Kuester, a two-story brick residence, irregular in size, to cost $2,000; under way. For Mrs. Rockel, a two-story brick tenement house, 30 by 55 feet, to cost $3,800; under way. A boathouse, 32 by 70 feet, Swiss architecture, cost $2,500. For Mr. J. Robinson, a two-story frame residence, irregular in size, to cost $2,000; under way. For Mrs. Annie Webster, a two-story frame residence addition, to cost $2,000; under way. For Mr. A. J. Andrews, a two-story brick addition to residence, to cost $1,800; under way. For Mr. A. C. Smith, a two-story frame residence, irregular in size, to cost $2,500; under way. For Mr. W. C. Townsend, a residence of pressed brick and terra cotta, irregular in size, to cost about $12,000; contracts not let. Also several residences ranging from $1,600 to $2,000 in cost.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating

GRATE.



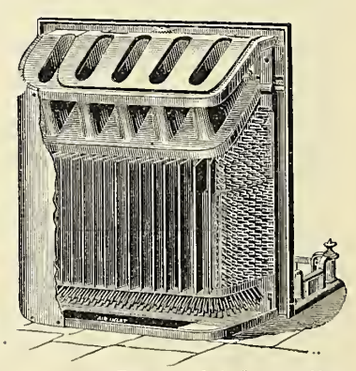
Washington, D.C., March 29, 1883.

Gentlemen:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



St. Paul, Minn., Nov. 17, 1883.

Messrs. E. A. Jackson & Bro., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

Elkhart, Ind., Jan. 14, 1884.

E. A. Jackson & Bro., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

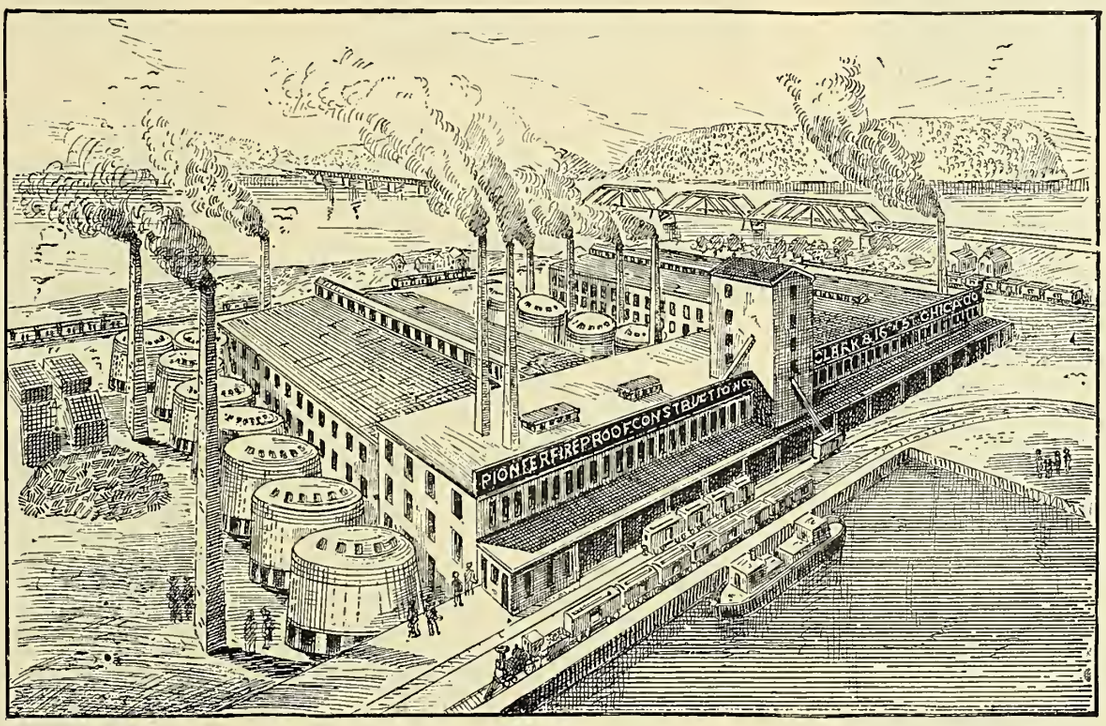
The Inland Architect and Builder.

SUPPLEMENT.

Vol. IV. AUGUST, 1884. No. 1

A Visit to a Fireproof Material Works.

NOWHERE in the world is the fireproofing of important buildings so general as in Chicago and other western cities. In European cities, where stone and brick construction is more general than here, there is less danger from fire, but never before in the history of building has the thorough fireproofing of all parts of a structure been accomplished. Upon visiting one of the many large office buildings under construction in Chicago now being treated in this way, that being built for the Royal Insurance Company of London, by architect W. W. Boyington, fireproofing in all its details was seen. Between the brick walls and main partitions are heavy iron girders supported upon iron columns, these girders supporting iron joists in the general methods of iron construction. But recognizing that unprotected iron is as dangerous as wood in case of fire, fireproof tile have been made to cover each particular piece of ironwork. Columns have been fitted with concave sheets 2 inches thick; between the joists were flat arches of hollow tile, the arches ranging from 4 to 9½ feet in span and the material from 5 to 12 inches in thickness. These prefatory remarks will indicate how it happened that the writer in response to an invitation from Mr. Ernest V. Johnson, the manager of the Pioneer Fireproof Construction Company, who place the larger part of the fireproof work in Chicago and the West generally, inspected this building, and with Mr. M. Morris, the building superintendent, accompanied that gentleman on a visit to the company's works at Ottawa, Ill., which we illustrate.



It was a glorious trip in glorious company, or, as a prominent builder remarked upon being told of the trip, "It would be a big thing for Chicago if we had a dozen more men like our friend there" (meaning our host). The time of starting was 4.45; the route chosen, that of the Fox River branch of the C. B. & Q. railway. Architects, builders, and all other active men who look forward to a railway ride as a time of rest, speak highly of the comforts of the C. B. & Q. railway, or better still, take it when they can, whether it be to an Illinois town or the city of Mexico or California. Need we tell of the trip? From the smoke and heat of the city shooting out into green fields, beautiful little towns lying on the edge of green seas of prairie-grass or wheat-fields, the "shore" marked by bright and many-colored flowers, and the view spreading away, sometimes over miles of green as level as the sea on a calm day, to the blue sky beyond, or again gently rolling like the sea after a storm.

Following the beautiful Fox River valley, the river with its wooded banks, its dells, its gorges and rocky banks, now on one side, now on the other, and again an hundred feet below as we rush over one of the 72 bridges that are passed before Ottawa is reached, the rest we have looked for comes and we can hardly determine whether it is from the comfortable seats of the smoothly gliding train rushing over its perfect roadbed or from the beautiful scenery that everywhere meets the eye.

The time is passed in comments on the building sites, or the possible quality of the stone in the ledges on the river bank, in reminiscences and in personal biography, with glimpses of cool hollows and shady groves of elm and maple trees exceedingly inviting, the sun just ready to drop behind the woods and throwing its "angel paths" through the trees, adding to the restfulness of the scene, and all making this trip along the Fox river long to be remembered. It was four miles from Ottawa that Mr. Johnson, a facetious gentleman, as everybody knows, directed our attention to the "damed river" and showed us the dam that supplies his works with motive power. It was also remarked that for a river of such beauty it was strange it was so frequently damed by the people along its banks. A "feeder," a small canal in size, originally built to supply the Illinois canal from this dam, follows the river at a higher level. Ottawa is reached; past large flint-glass works, plate-glass works, across the Rock Island railway tracks and a bridge, we land at the depot and are welcomed by Mr. Ongston, the superintendent of the tileworks.

The Clifton House, where we enjoyed an excellent supper, is one of the largest and best arranged and built hotels in the state outside of Chicago. It was built in 1874, by architect W. W. Boyington, and has, through the energetic management of mine host Rogers, a reputation that ranks it with those of the metropolis.

The evening was devoted to seeing the tileworks, for to our surprise the work is kept up without intermission day and night. In view of a more extended and systematic inspection by daylight this was made simply a visit. We pass the courthouse, built last year by Architect M. L. Beers, points of which are discussed during a walk of less than five minutes to the factory, which is situated on the river, in the center of the city, where, upon entering the office, we are received by the superintendent and conducted through the works. Steam presses, handled by brawny men, pressing out the different forms of tile by the light of frequent gas-jets, the tile in embryo being placed on barrows and to disappear in the darkness. Again, lit by a flaring gas-jet, we come to huge rollers, around which several men are working, shoveling in clay and scooping it out again; and as the writer, at the manager's suggestion, threw a huge block of clay under the immense wheels, and the slow revolving weight of iron drew it in, labored, stopped, and finally, slowly but surely, crushed it, we were forcibly reminded of Longfellow's lines:

"Tho' the mills of God grind slowly,
Yet they grind exceeding small."

The kilns were in full blast, and, with their fire-doors open and the red light streaming out upon the half-naked men, a hades in miniature was represented.

Finally we found our way back to the hotel, and being shown to a large room, with a bed for each of the party, the desire of the meeting was that we keep together rather than scatter to separate apartments. Here we enjoyed the delicious breeze and other delicious things till the thought of an early start in the morning sent us to bed, where, just as Morpheus seized us, a huge beetle, who had been contemplating suicide for some time, dashed his brains out against the wall and dropping to the floor left us to undisturbed repose.

The first glimpse from the windows in the morning was one to be remembered. Away over the roofs around were the wooded bluffs and



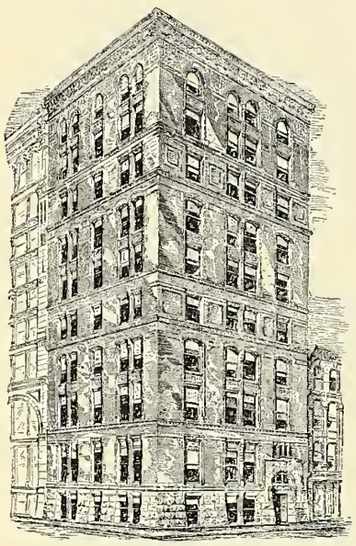
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James G. Hill, Arch't.



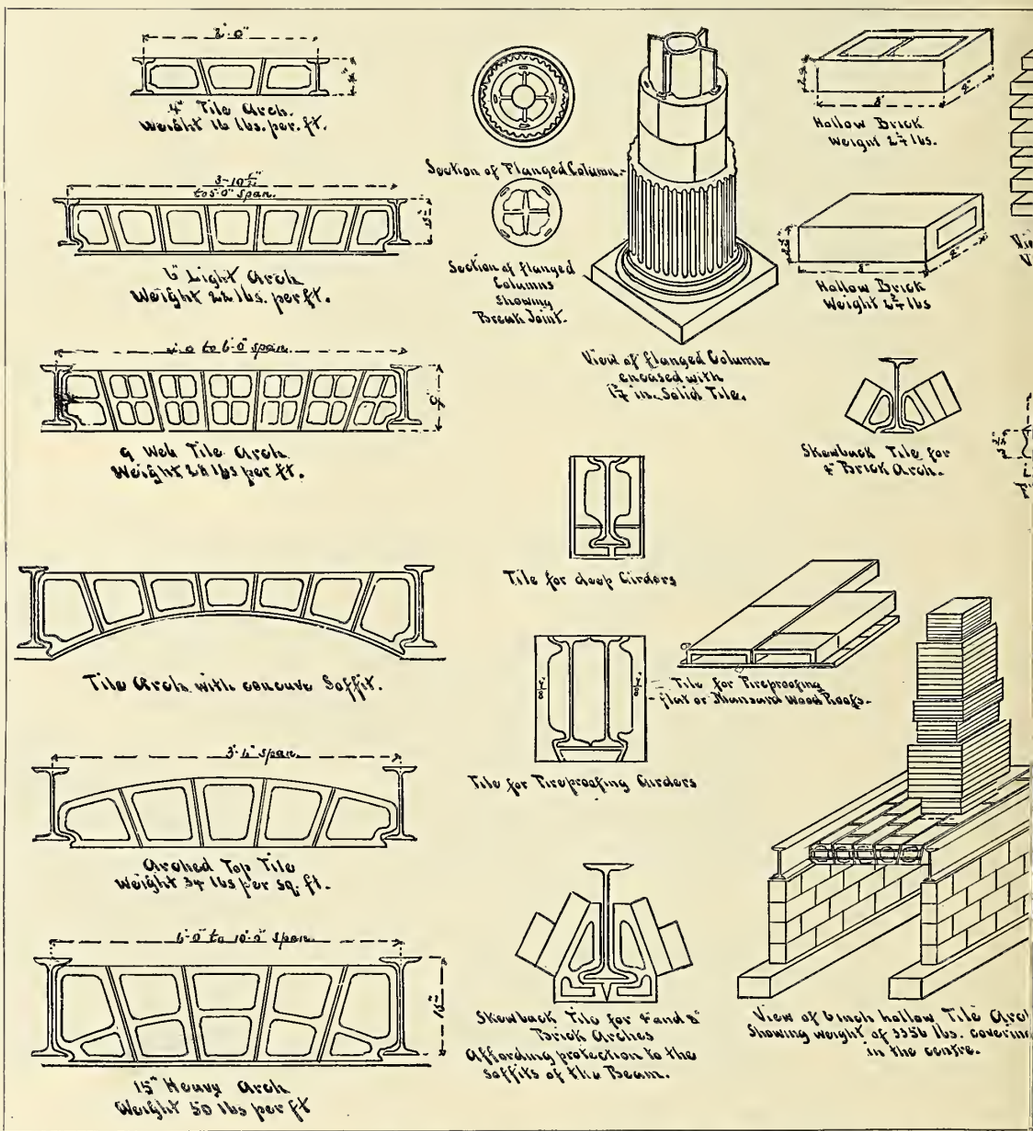
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J. J. Egan, Arch't.



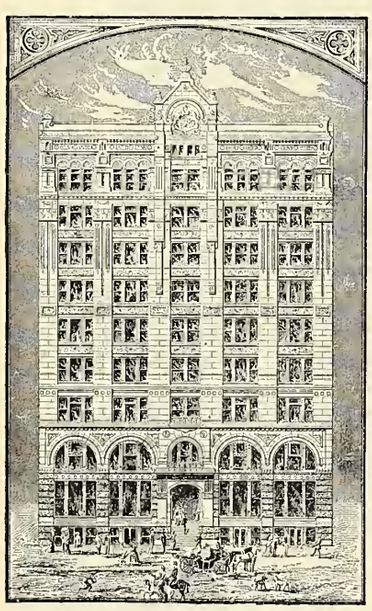
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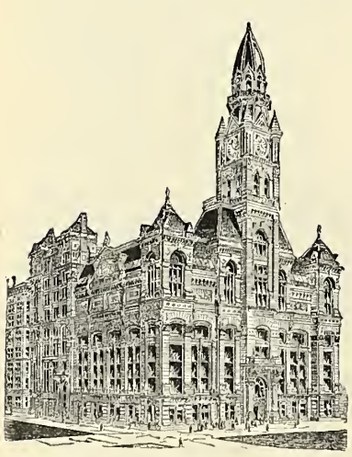
COUNSELMAN OFFICE BUILDING, CHICAGO.
Burnham & Root, Arch'ts.



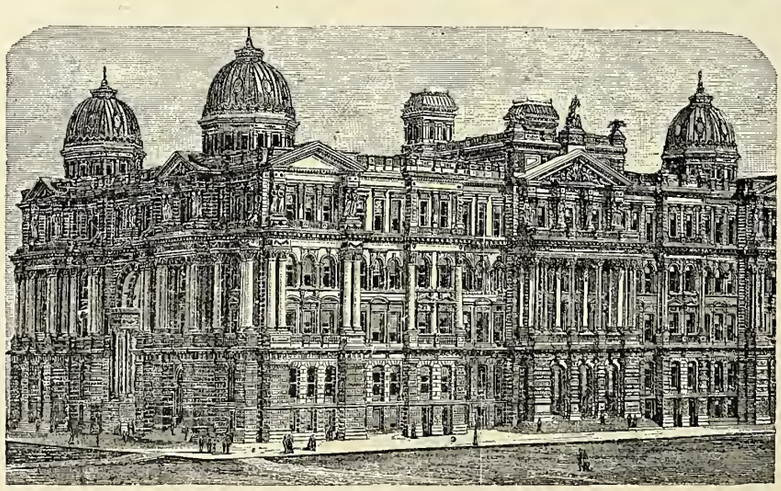
VIEWS OF VARIOUS SYSTEMS OF HOLLOW TILE INTRODU



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W. W. Boyington, Arch't.



BOARD OF TRADE BUILDING, CHICAGO.
W. W. Boyington, Arch't.

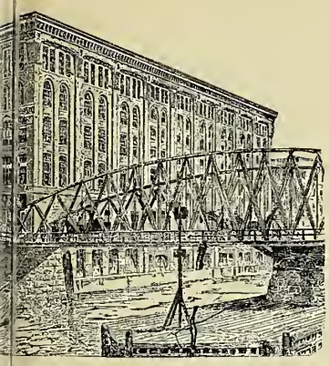


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J. J. Egan, Arch't.

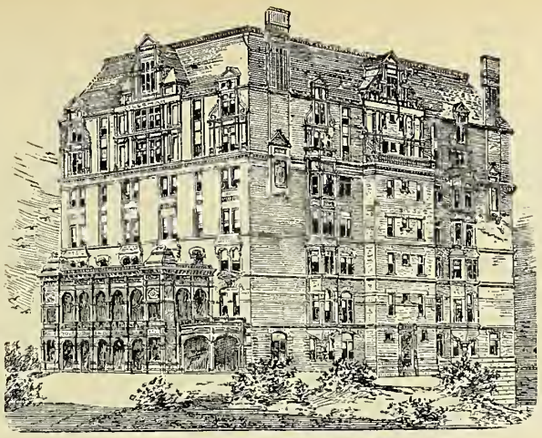


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PROMINENT BUILDINGS FIREPROOFED WITH HOLLOW TILE H



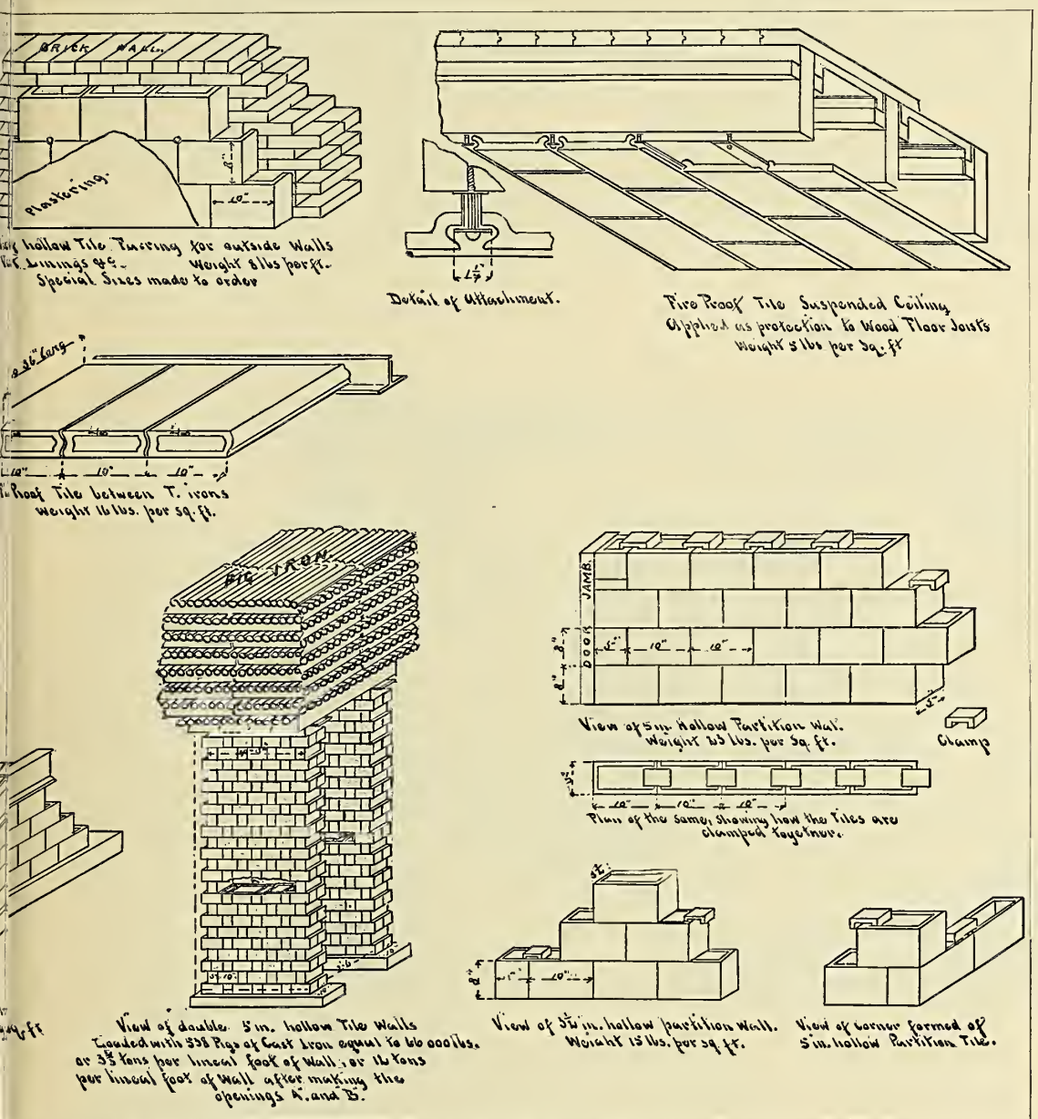
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Geo. H. Edbrook, Arch't.

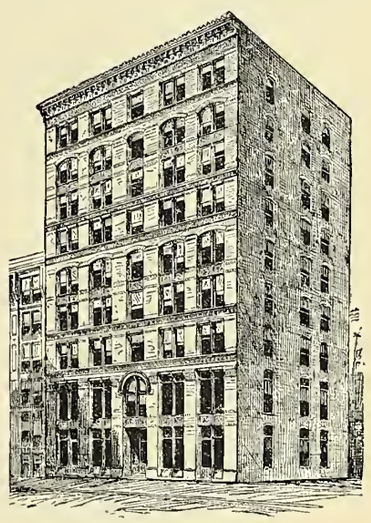


STILLMAN APARTMENT BUILDING, CLEVELAND, O.
H. W. Phillips & Co., Arch'ts.



MARSHAL FIELD & CO., RETAIL STORE, CHICAGO.
E. S. Jenison, Arch't.





CALUMET OFFICE BUILDING, CHICAGO.
Burnham & Root, Arch'ts.

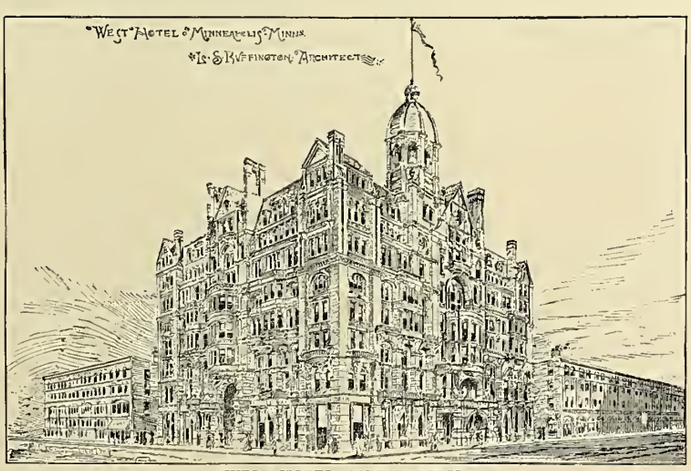


MONTAUK BLOCK, CHICAGO.
Burnham & Root, Arch'ts.

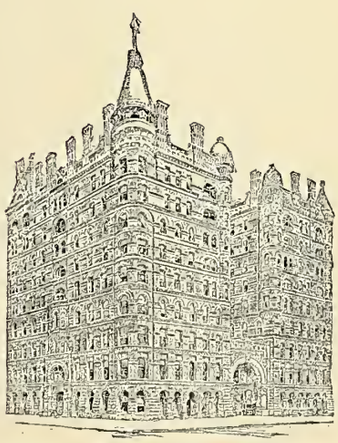
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CE BUILDING, CHICAGO.
I. Van Osdel & Co., Arch'ts.



WEST HOTEL, MINNEAPOLIS.
L. S. Buffington, Arch't.



PULLMAN'S OFFICE BUILDING, CHICAGO.
S. S. Beman, Arch't.

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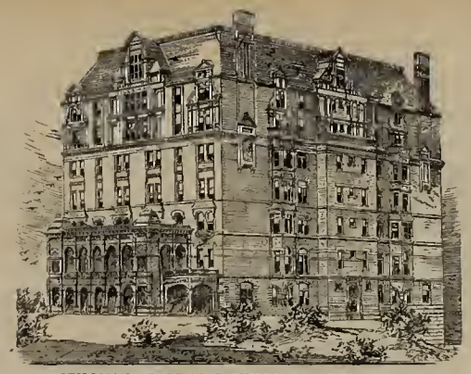
U. S. CUSTOM HOUSE AND POSTOFFICE BUILDING, CHICAGO.
James G. Hill, Arch't.



RYAN HOTEL, ST. PAUL, MINN.
J. J. Egan, Arch't.



HIRAM SIBLEY WAREHOUSES, CHICAGO.
Geo. H. Edbrook, Arch't.



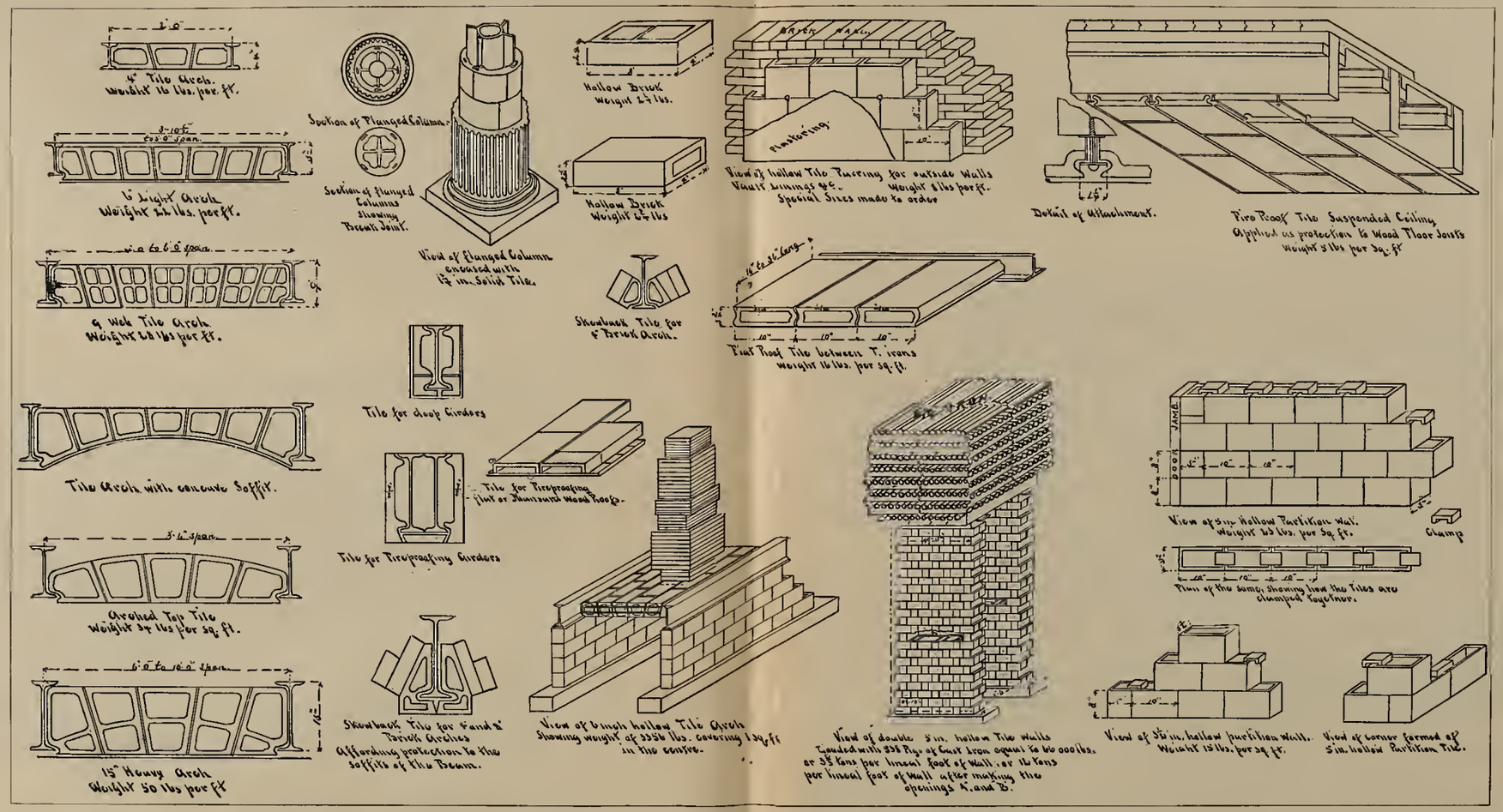
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E. S. Jenison, Arch't.



COUNSELMAN OFFICE BUILDING, CHICAGO.
Burnham & Root, Arch'ts.



VIEWS OF VARIOUS SYSTEMS OF HOLLOW TILE INTRODUCED BY THE PIONEER FIREPROOF CONSTRUCTION COMPANY.



CALUMET OFFICE BUILDING, CHICAGO.
Burnham & Root, Arch'ts.



ROYAL INSURANCE BUILDING, CHICAGO.
W. W. Boyington, Arch't.



MONTAUK BLOCK, CHICAGO.
Burnham & Root, Arch'ts.



BOARD OF TRADE BUILDING, CHICAGO.
W. W. Boyington, Arch't.



CITY HALL AND COUNTY COURTHOUSE, CHICAGO.
J. J. Egan, Arch't.



PARKER OFFICE BUILDING, CHICAGO.
J. M. Van Osdel & Co., Arch'ts.



WEST HOTEL, MINNEAPOLIS.
L. S. Buffington, Arch't.



PULLMAN'S OFFICE BUILDING, CHICAGO.
S. S. Beman, Arch't.

PROMINENT BUILDINGS FIREPROOFED WITH HOLLOW TILE BY THE PIONEER FIREPROOF CONSTRUCTION COMPANY, CHICAGO.

rocky shore of the Illinois river, which is joined by the Fox at this point on its way to the Mississippi; the valley between its banks lying in the soft light of the morning sun, green, fresh and as restful as the song of the robin in the cherry-tree in the garden below.

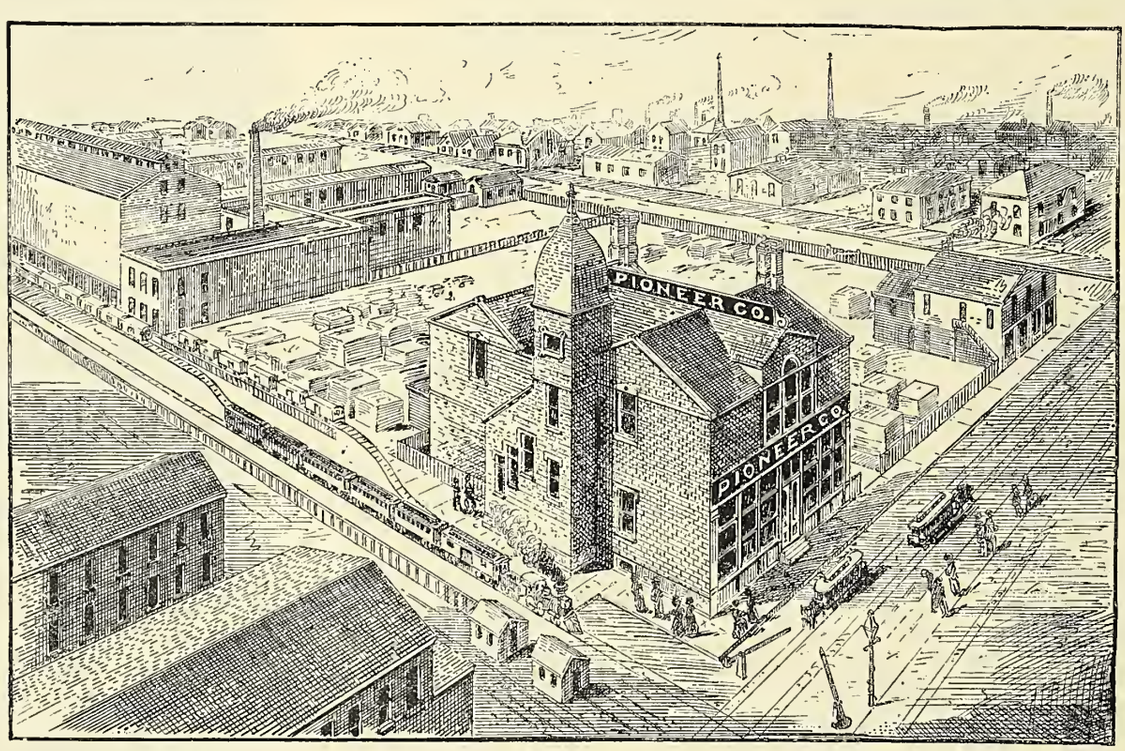
After a hearty breakfast, Mr. Johnson, anxious to show the beauties and manufacturing facilities of the city, called a carriage, and, accompanied by mine host of the hotel, we drove through streets lined by shade-trees, across bridges and out upon a well worn macadamized road eastward to the clay mines of the Tile Co. These cover fourteen acres. The first stratum is loam, the second shale, the third about two feet of a good quality of coal, and at last a 12-foot vein of the best quality of fireclay, with outcroppings of a fine white and plastic potter's clay. The claybank stands on a picturesquely located hill, and though at present the clay is hauled by wagons, the company contemplate a tramway that will carry the clay by gravity most of the distance to the works.

The drive was long and enjoyable, and at last the factory was again reached, and a regular inspection commenced, after bidding farewell to Mr. Morris, who was obliged to return to the city, it being the first time he had been absent for an hour since the Royal building was commenced. We regretted to see him go, as a better companion, more intelligent and honorable gentleman than he is not found; his experience and friendliness adding much to the pleasure of the trip.

Conducted by the foreman, we were shown the clay-cellar under the driveway, which has a capacity of about 1,000 tons, where the wagons unload the clay through hatchways. This clay is carried to the huge crushers. This apparatus consists of a large circular pan revolved by the huge shaft leading from the water-power, and two cast-iron wheels about 5 feet diameter by 10 inches of thickness and 4,500 pounds weight, which are in turn revolved by the pan beneath, the rotary motion of the pan and the inside diameter at the base, about 12 feet high in the center, and built of firebrick. The doors are upon an improved plan patented by Mr. Johnson, the bands around the kilns being fastened to an iron door frame, which receives the expansion or contraction of the bands. About eleven kilns a week are burned, the action of the heat upon the clay being exceptionally perfect, few cracks being observable in the finished tile.

The motive power of these works consists of 125-horsepower, run by a 25-inch Victor Turbine wheel under a 28 foot head. Two boilers are used for heating and supplying steam for the die presses, and an engine of 60 horsepower is held in reserve for emergencies, for as these works run night and day the possibility of a stoppage from any cause must be provided for. This hydraulic plant is considered by experts to be the best that has ever been placed in the West. The water-wheel is set on a solid base of natural rock, supported upon iron rails. A four-foot pit is dug in the rock below the wheel connected with the tail race. The water from the hydraulic basin, which is 27 feet above the tail water, is conducted to the wheel through a 4-foot iron pipe 120 feet long, water being taken from 3 feet below the water-level in the basin above. This obviates all difficulty from sticks, grass and other obstructions passing through the pipe, and interfering with the operation of the wheel, and effectually does away with the possibility of all leaks.

The history of these works is as rapid as it is extraordinary. Three years ago an old mill was converted into a small factory, and with additions and improvements has become what the visitor now sees, the largest and best conducted fireproofing manufactory in the West. A great deal of work besides the construction of fireproof buildings, kilns, etc., has been done. Some parts of the works have been built on raised ground, and underneath the walls the tail race from the water passes through an arched tunnel and



straight motion of the wheels set at right angles with the shaft giving them an enormous grinding as well as crushing power. The crushed clay finds an outlet in the side of the pan, where it is caught up by ordinary elevator buckets and carried to the top of a tower 70 feet high, where it is forced through a screen, and passing through a shute is conveyed again to the ground floor, where it is tempered in a similar machine to the crusher, the wheels only being about half as thick. There are two sets of crushers and two tempering machines, and their capacity is about 100 tons per day. The tempered clay is again elevated and distributed to several steam-presses which produce the tile. The press consists of a cylinder placed in a perpendicular position, and works a plunger which forces the clay through the dies and on the floor below the tile is cut to the required length and wheeled away to the dry-rooms.

The dry-rooms are arranged in two three-story buildings, all built of 3½-inch hollow tile. In fact, the company use hollow tile wherever it is possible, in walls, chimney stacks, etc., as it has proved to be the best material to withstand the heat; the surface of a kiln chimney being comparatively cool with a coal fire on the inner side.

These buildings are arranged with three straight floors with half-story communications made by easy inclines so that material can be readily transferred from floor to floor. They cover 90,000 feet of space and were almost entirely covered with the different descriptions of hollow tile which are constantly turned or handled on the floor till dry enough to burn. The tile is also moved from floor to floor by an ingeniously arranged belt elevator fitted with shelves. The dry-rooms are all fitted with over 13,000 feet of steam pipes to assist in drying.

Perhaps the most important feature of this great "plant" is the burning kilns. These, thirteen in number, are arranged in two tiers, and are all of the latest improved pattern. They are circular in form, about 22 feet out to the river beyond. This water tunnel had to be built directly below a row of kilns, and as the chimney stacks are large and heavy the engineering skill exhibited is worthy of note.

The officers of the company are Mr. George M. Moulton, president; Mr. A. T. Griffin, vice-president; Mr. E. V. Johnson, secretary, treasurer and general manager; and it is due to the latter gentleman's enterprise and business sagacity that the building and progress of these works is due. The buildings were planned by him; he is the patentee of a number of the different patents of the company, not alone in the different descriptions of tile, but in much of the superior apparatus employed in the manipulation of the clay, notably the firekiln doors, which are an invaluable improvement upon those ordinarily used. As the business of the company extends to all parts of the country, Mr. Johnson has become widely known to architects everywhere, and few young men enjoy a more enviable reputation than he.

These are the facts gathered through an inspection of these works, and with the 100 men employed in their manipulation and the important part they occupy in the building field, they should be visited by every owner who is contemplating extensive building, for all extensive structures should be thoroughly fireproofed, and that in a reliable way with reliable material. We have written somewhat upon the pleasure of the trip that future visitors may know that a trip here can be made a holiday as well as a matter of business, and if the moneyed men of Ottawa would look at the possibilities which surround the future of their fair town, they would spend some of the wealth they have accumulated, and at an early day the city would not only be the finest in the West but double its population, and be famed alike for its manufactures and its pleasure resorts.

A description of the Chicago office building, illustrated above, will be found on page 11.

THE INLAND ARCHITECT AND BUILDER.
Vol. IV. No. 2

SEPTEMBER, 1884.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE $1.75 PER YEAR.

($2 FOR FOURTEEN MONTHS, IN ADVANCE.)

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

PUBLISHED BY THE INLAND PUBLISHING CO.
17 TRIBUNE BUILDING, CHICAGO, ILL.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on page xvi.

ALREADY more than two hundred architects have responded to our circular calling a convention of members of the profession, particularly of the West and South, to meet in Chicago November 12, and we are pleased and gratified that the number includes some of the most honorable and best known names in the profession. The project of forming a western association of architects is heartily endorsed, without an exception, by the writers, and a large majority state that their attendance may be counted upon. These ready responses and enthusiastic endorsements show how great has been the need of a movement of this kind in the West, and coming, as they do, from our farthest northern, southern and western boundaries, the widespread extent of the movement is indicated. The city of Chicago is now in admirable condition for inspection by architects, for there are large buildings in all stages of completion, and a more interesting city to the profession can hardly be found. The circular issued to architects has been mailed as accurately as possible, with the intention of reaching all architects, south and west, and any who have not received one will gratify us by making the fact known. A general invitation is extended to the entire profession, whether they receive the invitation circulars or not, the fact of fraternity being sufficent to insure a hearty welcome. We trust that those who have not yet responded to our circular will do so at their earliest opportunity.

ARCHITECTURAL drawings, it is suggested by Architect Henry Lord Gay, would form an interesting and valuable exhibition during the Chicago Convention of Architects, in November. To this end he has issued a circular offering to furnish free of cost to exhibitors ample exhibit space; to thoroughly advertise the exhibit, and throw it open free to the public. Drawings to be sent not later than October 25; exhibition to open one week previous to the convention and continue two weeks, and to include all classes of architectural drawings, the hanging to be in charge of a committee of five. Architect Gay will be glad to send a circular of full particulars to any who have failed to receive one. The proposed exhibit will be of unquestioned benefit to architects, besides giving the public a better appreciation of the work of the profession, and the progress architecture has made in America, and we hope and expect there will be a large representation of the architectural talent of the country.

THE Chicago Custom-house and Postoffice has for several years been the cause of periodical agitation in government and civil circles, the agitation occurring through the daily press simultaneously with each new crack in the walls. Like the "crack o' doom" each sound has reverberated through the country and created a little more stir and comment than the New York earthquake. Some have believed every ghost story that has been circulated, and even the most conservative citizen and the inquiring engineer and architect have said "what does it mean?" The time having come for a statement, we present the facts, with such deductions as may seem allowable, in advance of the government engineer's report. The latest crack is the most serious. The walls of the elevator shaft, which also form the support of girders upon which the floor beams of the main hall rest, cracked some time ago, but suddenly began to crush. The building superintendent at once supported the girders with jack-screws, and ordered iron pilasters of sufficient strength to hold them, which were soon placed and found a success. If prompt action had not been taken, the fall of this portion of the main floor would have probably followed, though this particular crack did not extend above. A walk through the basement shows solid 32-inch brick walls cracked through, stones a yard square crushed, and some resting on the side of their joints with the stone below so that light is seen through. Through the building almost every division wall which joins the outside walls is more or less cracked—the widest aperture being at the top, and decreasing in width in the stories below. A walk around the exterior shows the same state of things, the numerous joints in the stones being parted, beside large stones breaking. Investigation shows that the walls in every case spread outward, and a plumb line shows an outward deflection of upwards of seven inches in some of the walls, and by adding together the total width of the exterior cracks this is not surprising.

NO one doubts that the causes which have led to this state of things lies in the foundation. The entire area of the building site is covered with a seven-foot layer of concrete. Upon the outer edge of this the heavy walls are placed. Where a settlement has occurred the outer edge of this concrete bed has been forced down, and, breaking off from the main body at irregular distances, the concrete has acted as a lever and forced the walls outward. This outward movement is aided by exceedingly heavy cornices and pilasters that are outside the line of the foundations. Some of these cracks can be charged to the material. Those in the joints may be owing to the inferior quality of the cement used, and in the stone because of its softness, but this feature is hardly worthy

of mention. It has been intimated that the weight of piers and walls was not properly balanced, but we are dealing with facts, and this is but a surmise. The remedy is the main subject for discussion at present. What the government engineer, Mr. Lowe, who lately inspected the building, may officially report we do not attempt to conjecture, and, with all due respect for that gentleman as an engineer, we do not think that a mere inspection, without a knowledge of the soil to be dealt with, and experience in Chicago foundations, will be especially valuable, but, whatever is done, the superintendent will be sure to do to the best advantage possible. The remedy that might be suggested as the sure one would be to tear the building down, put in proper foundations, and use the material in building again, covering the entire block even with the street—for the structure is even now too small for the different purposes it is used for, and a new building for law courts and custom purposes will have to be built at no distant day. It is useless to talk of this remedy, however, and, if an appropriation of $100,000 can be secured, much can be done to make the building secure. This can only be done by reinforcing the foundations, and by a system of iron rods running either way entirely through the building at every floor and bolted outside the walls. This would not add to the beauty of the exterior, but would prevent further spreading, and a building that cost $4,600,000 would be certainly worth saving for the sum mentioned. At all events something must immediately be done—not so much because a positive disaster is threatened as that the settlements are still going on, and the longer repairs are delayed the nearer the condition of the building will come to where rebuilding will be compulsory.

THE recent decision of Acting Secretary Coon, not to approve the plans of any of the new buildings authorized by congress which contemplate the erection of a structure at a cost exceeding the limit fixed by law, has created a commotion in several cities where new buildings have been authorized. The practice in the past has been for congressmen to secure an appropriation, say of $100,000, for a building, and then have the supervising architect prepare plans of a building to cost $300,000 or $400,000. At the ensuing session of congress the congressmen would secure an additional appropriation on the plea that the building could not be finished for the amount first fixed upon by congress. In this way public buildings have been made to cost three or four times as much as congress intended in the first place. This decision abolishes the custom, and requires the original plan of the new buildings to be made, so that the cost of completing them will not exceed the limit fixed by congress, and will be a valuable move in the direction of securing for the public buildings that in honesty of construction will rank with those for private parties. When an appropriation is made and plans are drawn to accord with the sum designated, the different parts of the building can be planned to suit, and though the ultimate cost may be less than of a building constructed piecemeal and squeezed through by a series of appropriations, the ultimate result will be more satisfactory and the building more symmetrical. As we have before stated, it is time the public work of this country should be relieved of its peculiar inaccurate quality, for there is no real reason why a custom-house, built by the government, should cost more than the allotted appropriation, or be less substantially built than a building erected for a private party. In fact the buildings of the government should always be models of design and construction rather than, as has been too often the case, a reproach to the building profession.

PLUMBERS, in their relations with wholesale dealers in plumbing materials, are, we think, entitled to the same protection that the wholesaler in other departments of business accords to the retailer. They should not be placed at the disadvantage of having to compete in prices with wholesale dealers in bidding on work. Among the Master Plumbers' Associations we have observed the constant desire to elevate the craft in every possible way from the disrepute in which it has been held through the poor work and exorbitant charges of incompetent and dishonest members. This desire we see again expressed in their request that manufacturers and dealers in plumbing materials shall sell to only such plumbers as have a certificate from the association to which they belong. This would result in weeding out the "botches" and disreputables, as only competent plumbers of good repute are allowed a certificate by the associations, and all others would be compelled to give up the business through inability to obtain materials. If proposition No. IV of the resolutions of the Master Plumbers' Association: "That any plumber who waives his discount in favor of his customer shall have his certificate revoked," was supplemented by a demand that the present large discounts should continue, it would show the intent to reap big profits. In view of the fact, however, that the manufacturers and wholesale dealers could, and, no doubt, would revise their prices and discounts so that at list prices the plumbers would make but a fair legitimate profit, this proposition becomes but the expressed wish to prevent ruinous cuts in prices. In construing these resolutions, we think that the master plumbers are entitled to be regarded as worthy members of a worthy craft, as their efforts in recent years to purify and uplift their calling have shown them to be. The resolutions, we admit, may be construed to favor extortion, but we are confident those who approved them did not intend this, and we look for a new set of propositions that shall not be open to this criticism and to which the manufacturers and dealers can agree.

ENTERING upon the fall season, after an unusually active spring and summer, we find the architects are the only ones who have been favored with a brief respite from labor, and they in most cases could have found plenty to do had not the question of health necessitated rest. The continuance of improvement both in business and residence property is assured. The capitalist has not been lured by the necessities of a great calamity, as in 1871, when a city was to be rebuilt, nor has he been drawn here by false impressions whose legitimate outgrowth — wild speculation — promises untold wealth in a very limited space of time, but of his own free will he has come to join those who are already realizing that by industry and safe investment they have laid the foundation of a city that will, in the history of our country, shine out as a bright example, guarding future generations against rash speculation and the desire to get something for nothing. It is certain that, with favorable weather, the fall building season will be carried far on into the winter, and it is safe to predict that, after a short period of rest during the cold months, the spring of 1885 will open and find Chicago again ready to lead the world as a building centre.

ACCIDENTS are becoming too common in the construction of our large buildings, and as daily reports come of lives lost from falling scaffolds, it is but right that the causes be ascertained as nearly as possible. The two main causes are, as in almost every kind of disaster, ignorance and carelessness. The first is the more excusable, if either are worthy of excuse, but the latter is in almost every case not only inexcusable, but criminal in its nature, the pun-

ishment fortunately being, in the majority of cases, suffered by the guilty party. In this country, where foreign workmen are so largely employed, ignorant of our methods and of our language, which prevents instruction, the foreman should always be selected for his careful thoroughness and knowledge of men as well as for his knowledge of construction. When the superintendent or foreman has done his duty in his selection of men for any particular piece of work, especially of a difficult character, he should, by personal inspection, see that his directions are carried out. The careless man should be immediately discharged, no matter what his value as a mechanic may be, the first time he is known to throw a piece of board from the roof or leaves an ax or a chisel upon a scaffold that is liable to be moved. The construction of scaffolds should be particularly watched. Too few nails or insufficient braces often lose lives, and economy should never be taken as an excuse by a coroner's jury, any more than "we were in a hurry," or "we thought it was good enough."

ARCHITECT Walter Blythe, of Cleveland, for many years a prominent member of the profession and president of the Board of Water Works trustees of that city, died on the 18th ult. Mr. Blythe was born at Leeds, England, fifty-eight years ago, came to America in 1849, and one year later located in Cleveland. He learned the avocation of a stone-cutter from his father, and later became a carpenter and joiner, which trade he pursued for several years. After a term of years, he became a draughtsman, and from that his inventive genius soon led him to adopt the business of an architect, in which he has been eminently successful. Among the substantial evidences of his skill may be found the new court-house, Outhwaite, Tremont, and Detroit street school buildings, the Striebinger House, Brainard Block, Standard Oil Block, Euclid Avenue Block, Paine and Clark blocks, in Cleveland, besides several college buildings in Oberlin, and the court-house and jail at Steubenville, O. He enlisted in the Forty-first regiment Ohio Volunteers early in the war of the rebellion, and from regimental quartermaster became aid-de-camp on the staff of General W. B. Hazen. He was twice elected member of the Water Works Commission, and was near the end of his second term when death terminated his labors. The building fraternity was largely represented at the funeral.

Windows.

BY H. S. TREHERNE, ARCHITECT.

WINDOWS form a most important element in modern designing, and should play a leading part in the external elevations of our buildings. Still, how often do we find the primary requirements of architectural effect totally ignored in our modern houses! Light and cheerfulness are the great desiderata, yet how seldom the two go hand in hand in modern dwellings. The subject of windows is an important one, and cannot be too carefully considered, and I propose briefly to touch upon its main features, trusting it may prove of advantage to some of my fellow architects.

So much depends upon the climate, the position of the light, the aspect, and the obscurations caused by neighboring objects, that it is impossible to lay down exact rules as to the proportion of lighting space necessary for a given area. Rooms lighted from above require smaller lighting space than those lighted from the side. The Pantheon at Rome furnishes an example. This building contains 1,934,460 cubic feet of space, and is lighted by a small circular opening, 527 square feet in area, located in the roof; whereas, by Morris's rules, hereafter given, 1,391 square feet of space would be required if the light were taken from the side. Sir William Chambers is said to have taken one-eighth of the sum of the depth and height as the width of the window. Gwilt gives as a general rule, one foot of lighting surface to every 100 cubic feet the room contains. Robert Morris's rule is the one most adopted; which is, the superficial area of the window should equal the square root of the cubical contents of the room to be lighted. As a general thing, this last rule works to the greatest satisfaction, and yet it is subject to great variation, as certain rooms require more light than others. We would not expect as much light in a dining room as we would in a drawing room or a parlor, and a dressing room should be better lighted than a bedroom. Though there are no actual rules to guide us in the question of the distribution of lighting area, there are many reasons which may affect our arrangements. What calls forth the highest qualities of the architect is the judicious arrangement of the window openings, so as to suit the effects as seen from the room, and at the same time suit the external appearance. I may here call your attention to one important point. When one well-proportioned window will not properly light a room (assuming the light is from one side only) there must be *three* windows, not necessarily of equal size, for it may have one large and two small, but on no account should a room be lighted by an even number of windows on one side. A room lighted by two windows on one side always strikes you as gloomy, for the reason that there is a pier where there should be a window; yet hundreds of houses are built entirely ignoring this principle, no doubt, in most cases, to preserve the uniformity of the elevation. In the majority of rented city houses we find the front cut up on the first floor, with a hall on one side and a parlor on the other. The parlor is frequently lighted by one large window, or a triple window in the center; it is, therefore, usually the best and pleasantest room in the house. The dining room generally has two windows, and is consequently gloomy with its large central pier. On the second floor we find a small alcove or hall dressing room, well lighted by a single window, but the front bedroom has two lights with a pier in the center, giving it the same gloomy result as in the dining room. The dressing table, being an important piece of the furniture, must either stand between the windows, where the light is bad, or else must be put on one side or under the window, and thus give an unevenly balanced appearance to the whole room. These are very common instances of the sacrifice of internal comfort to external uniformity of appearance, for what is true of the interior is also true of the exterior, namely, that a void should fill the center of the wall. There are, however, many ways of combining the two advantages, with excellent results in the design.

The proportion of voids to solids should be governed by the necessities of the internal arrangements, though, as a general thing, the area of voids should never exceed the area of the solids. Thus, in a warehouse, where light is the greatest desideratum, the windows should form the main feature of the design, whereas, in a prison, the stone walls should be the most prominent characteristic and the window openings should be small. We would condemn as unsuitable a prison building with large and numerous windows, even though it were made absolutely as safe as with few and smaller openings, while, on the other hand, we would praise a well-lighted warehouse. The same, therefore, should hold good in buildings generally between these two extremes.

Much has been said and written of late concerning a distinctively modern and essentially American style of architecture. Let us "design in beauty and build in truth," adopting modern forms and expressing modern requirements, and, especially as regards our windows, give to our houses the appearance of being inhabited by modern men and women, making the design of the exterior subsidiary to the internal arrangements, and we can rely upon this external expression of the uses of a building to develop into a distinctively modern style of architecture, and, since the requirements of the people of the American continent differ from those of the older countries, we will at the same time arrive at an essentially American style.

Before considering the internal finishing of the windows, I would submit a few suggestions as to their construction, which, I am confident, have only to be tried to be adopted.

FIRST.—The ordinary double sash window has the lights of glass in the top sash the same size as those in the bottom sash. It will be found preferable to make the lower sash somewhat the larger, thus enabling us to open the window wider, and in most cases getting rid of the unpleasant appearance of meeting a rail directly on a line with the eye. This improvement can be arranged by making the head of the frame differ slightly from the ordinary method of construction and so allow the lower sash to go up into it, or else to allow the lower sash to slide up through the head of the frame, the opening being filled with a piece of rounded oak which goes up and down with the sash, working in a groove.

SECOND.—If the pulley stiles of the frames of hung windows are made of oak it will make a great difference in the ease with which the sashes are moved, without adding greatly to the prime cost.

THIRD.—Whenever possible, splay your jambs, and the greater the splay the better will be the light admitted by the window into the room.

In the dwelling-house three things must be considered in designing the interior finish of a window—(*a*) that it interferes in no way with the light admitted; (*b*) that it is convenient for curtains, shades and blinds; (*c*) that it does not interfere with the furniture generally. As to the first point, it should be remembered that the nearer the ceiling the window-head is the

better the light—this is a fact well established. Where a room is finished with a cornice, a wide architrave should be avoided, as it lowers the window-head, and the designing of very elaborate architraves around a window opening is labor lost, since they are in poor light and are generally covered by the curtains. Of course the architrave should be in keeping with the general finished joinery of the room, but the elaborate enrichment of design devoted to a door architrave should be avoided around a window. The jamb lining, however, being in strong light, should have care bestowed upon its design. How often we see elaborately worked architraves with perfectly plain jamb linings around a window, when common utilitarian sense would reverse the order of things and make the architrave plain and the jamb linings enriched! The second point—the arrangements made for blinds and curtains—is, alas! often overlooked by the speculative builder, and, in nine cases out of ten, in rented houses the tenant has to secure his shades and curtains to the window casings or stops. Architects often keep the soffit of the linings about three inches above the frame, which makes a fairly convenient space for the shades, though it has the disadvantage of lowering the window head. To form a box above the lining, which can receive either a roller or Venetian blind, is no doubt a better way, with the advantage of being able to pull the blind up out of sight and in no way obstructing the light. The internal finish of windows, as regards the hanging of curtains, also merits consideration. The deep valance, or lambrequin, is by degrees losing its hold upon the public, and rightly too. A window is for light, air and cheerfulness, but the deep valance, cut and tortured into fantastic shapes, imparts a funereal gloom upon the room. A plain brass rod or wooden pole, with solid turned ends, and brass or wooden rings to carry the curtains, is a vast improvement in the right direction. Under the third point for consideration—as to the furniture generally—may be considered the question of window seats. Window seats are an old fashion, almost wholly abandoned in the present day. To my mind it is a thing to be regretted, since in giving up our window seat we sacrifice one of the pleasantest seats in a room. Think of any room you know of, blessed with window seats, and try and remember where in your leisure moments you naturally sit, and I think you will find it is in the seat in the window. Without it, no matter how fine the view, you can only enjoy it standing, for you cannot well draw a chair to the window; but if there is a window seat you drop in it naturally, and can enjoy the view at your leisure. A deep fixed seat in the window gives, too, an air of comfort to a room, which hardly anything else can give.

In closing, I would speak of four things to be considered in connection with windows. Next after the creation God said "Let there be light, and there was light." Let us remember the first great use of the window, and after creating the room let us also say "Let there be light," and see that our windows admit it freely and abundantly and sufficiently, bearing in mind that, after the record in the Bible above quoted, it is not for man to say there shall be darkness, and exclude the light. Light and sunbeams mean life and health to all men, and to exclude the one is to exclude the other. This is the first and principal thing to be considered. The second great use of the window is that we may look out of it and enjoy the view, and any arrangement that does not admit of this must be stigmatized as wrong. The third point is the admission of air and the ventilation of our rooms, without which we could none of us "live out half our days." And the fourth is that if we carry out the three first named points in the arrangement of our windows, and "build in truth," we will find our elevations becoming more truthful and representative of the age, and our nineteenth century American style of architecture will be formed almost before we are aware of it, and without laboring to produce vagaries and extravagances such as have been time and again submitted for us to adopt as a style.

In a brief article as this, I can only touch slightly the different points of the subject, and my paper, I fear, has told you little that you did not know before, yet, if it has led any one to note the importance of the subject and to consider how much the dignity and refinement of an elevation depends upon the treatment of its openings, and how much the comfort, security and health of the inmates depend upon the careful and scientific arrangement of the windows, it will have done some good and the time I have devoted to its preparation has not been lost.

At Terre Haute, Ind., August 28, the corner-stone of the new court-house was laid with imposing ceremonies under the auspices of the Masonic fraternity. An oration was delivered by Senator Voorhees, in which he gave a brief history of the city, etc. The design of the new temple of justice is an original one by Architect Samuel Hannaford, of Cincinnati, and is a combination of the Corinthian and other styles of architecture. The building will be three stories high, 226 by 277 feet; height of dome, 196 feet, which is 35 feet higher than the tallest spire in the city. The structure will be entirely of Stinesville stone from the ground to the dome. A number of Corinthian and fluted columns will add much to the dignity and beauty of the exterior. The contracts now let only provide for the stone work and the enclosure of the building. It is probable that this will be, when completed, the most imposing structure in the State outside of Indianapolis.

The Structural Formation of Woods.

BY A. L. TUCKER

(Of Chicago Manual Training School).

In all branches of mechanical science, timber has always commanded the attention of engineers on account of the facility and rapidity with which it can be reduced to any desired shape, its lightness and strength, elasticity and tenacity, giving it the preference over the metals in a large number of applications.

On account of the large and varied usage which timber undergoes, a knowledge of the formation of wood may not be amiss to the amateur and purchaser of material, to intelligently make such selections as would be best adapted to the situations which it would be likely to fill.

Timber is the substantial portion of all trees, and differs largely in quality and density, thus making it valuable for a large variety of work. It is obtained from the body of trees, or that part which rises from the ground unencumbered by branches, termed *trunk*, and from the larger or main branches; the *head* is that portion represented by the leaves, twigs and branches, which reach their full development in the summer, and, in a large variety of cases, loses it in the winter.

Trees are divided according to their structural formation, into two distinct classes, which are entirely dissimilar in nature. They both are formed by masses of pores, and the leaves in both are attached directly to the tree. Monocotyledons or endogens are termed to those trees which are formed by a growth *from* the exterior, internally; and dicotyledons or exogenous trees receive their increase *from* the interior, externally. The endogens are never provided with a distinct column of pith or medullary rays, which radiate outwardly from the centre of the tree like the spokes of a wheel, nor does the exterior covering assume the character of bark. They are found largely in tropical countries where they furnish the inhabitants with food and material for shelter. They are typified in the palm and bamboo, of which latter a writer in China recently said: "Bamboo is used for making soldiers' hats and shields, umbrellas, soles of shoes, scaffolding poles, measures, baskets, ropes, paper, pencil-holders, brooms, sedan chairs, pipes, flower-stalks and trellis-work in gardens; pillows are made of the shavings, and a kind of cloak for wet weather is made of the leaves. It is used for making sails and covers for boats, fishing rods and fishing baskets, fishing stakes and buoys, aqueducts for water, water-wheels, plows, harrows and other instruments of husbandry. Its roots are cut into grotesque figures and its stem carved into ornaments for the curious, or as incense burners for the gods. The young shoots are boiled and eaten. A substance found in the joints, called tabasheer, is used in medicines. In the manufacture of tea, it forms the rolling table, drying baskets and sieves. The all-important chop-sticks are made of it. It is in universal demand in the house, on the water and in the field. The Chinaman is cradled in it at his birth; through life it forms his constant companion in one shape or another, and in it he is carried to his last resting-place, to repose, even there, under the shade of its long oval leaves." With this catalogue of the uses of the bamboo we may dismiss the endogens.

A great variety of opinions exist as to the formation of the exogens, but all agree that the trunk and limbs are composed of bark, wood and pith. The bark is the covering which encases the wood, and its office is to protect the tender fibres and to form a channel for the conveyance of sap. It is easily divided into three distinct parts: the epidermis, cellula and liber. The epidermis is the extreme outer covering, and is continually wasting away. The cellula is the portion next inside, and is composed of an aggregation of cells or pores. The liber is the inner or newly-formed bark. At certain periods, a mucilagenous product, termed cambium, is secreted between the bark and wood, and is supposed to be the material from which new cells and vessels are formed. The wood is that portion encased by the bark, and is composed of woody fibre, ducts and rasiform tissue. Two kinds of wood exist in trees—heart-wood and sap-wood. The heart-wood is the hard, dense portion next to the pith, the sap-wood being between it and the bark. The pith is the soft, spongy substance enclosed by the heart-wood in the centre of the tree. It is composed of soft, cellular tissues, which, in the youth of the tree, abounds in nutritive matter for the nourishment of the buds, but after maturity, and in old age, becoming effete and dying.

The wood of no tree is a solid mass, but is honey-combed with pores, the only solid substance being the walls of the cells and which form a passage for the sap. In the spring of the year, ingredients in liquid form are absorbed by the roots. This liquid or sap passes up through the pores of the wood, dissolving in its passage a solid substance which it encounters and arrives at the leaves, where it undergoes a chemical change and returns to the roots, some through the cellula or porous portion of the bark and the remainder through a passage between the bark and wood formed by the expansion of the bark. As it passes to the roots,

a substance termed cambium, as aforementioned, is deposited, which is supposed to be the germs which are developed into new wood and bark. A deposit of this kind is made annually. Consequently, if the fibres of a tree be cut in a transverse direction, a series of concentric circles will be seen, the number of which will determine the age of the tree. As soon as the leaves are developed, sap ceases to flow and is not again in motion until fall, when it passes again through the pores of the wood, depositing the substance, which is dissolved in the following spring by the ascending sap.

As the tree continues to grow, the previously formed wood is compressed, thus closing the pores and making the wood hard and heavy. The outer layers of wood being porous and free to the passage of sap, is termed sap-wood, and is naturally soft and much inferior to the harder and denser heart-wood. Owing to the presence of saccharine and other matter contained in the pores of the sap-wood, and which it is impossible to fully remove, this wood easily and quickly decays, owing to the fermentation which will naturally take place within its cells. The annual layers of concentric circles become more dense as the tree reaches its maturity; consequently the sap-wood is gradually transformed to heart-wood; but, as this process is slow, several layers are generally comprehended in the sap-wood. Upon examining a section of wood grown in a northern latitude, the heart-wood will be found to approach the northern side of the tree. This is accounted for by the action of the sun's heat, which expands the pores on the southern portion, thus allowing a freer passage of the sap; consequently, the rings of concentric circles will be found to be narrower on the north side. It is the characteristic of trees of small diameter which contain a large number of rings, to be hard and heavy—a natural conclusion to the previously mentioned facts; and in large trees of few rings, or, in other words, in trees which are rapidly developed, the wood is light and weak; in some cases in both varieties the circles are quite indistinguishable, as is the case with the hard ebony and the soft poplar. Newlands is said to have counted 140 annual layers in a section of box-wood 7 inches in diameter.

The proper time for felling trees would most naturally be in that season when the pores of the wood are most free from sap, which, as has been observed, is in the wood during spring and autumn; consequently, trees should be felled either in the height of summer or in the depth of winter, as at these seasons the sap is ripening in the leaves, or in the latter case, has returned to the roots. The quality of the lumber will largely depend upon the amount of sap contained in the pores, and, as this is removed more efficiently and easily by natural rather than by artificial means, too much care cannot be taken in this particular. In no case should a tree be felled before it has reached maturity. The life of a tree has been divided, in comparison with that of man, into three periods—infancy or youth, maturity, and old age. During the whole of the first period the tree is developing and growing; through the second the growth ceases, but its vitality remains. As soon, however, as the heart-wood begins to decay, the second period ends and old age rapidly approaches; the comparison is not then inapt: for, like an old man who seems to be fresh and vigorous, but whom one storm of disease may sweep away, so often does a revered and venerable oak, still clinging to life as though loath to die, put on at each returning spring its "youthful robes anew." But its heart diseased and its vitality expended, being engaged in some unequal contest, in a tempestuous hour, falls to rise no more. As has been said, the tree should not be felled until maturity is reached. When a tree ceases to increase in size and its foliage disappears earlier in the autumn than it is wont to, it may be depended upon that maturity has been reached and the time for felling arrived. Too much care cannot, then, be taken to properly season the wood, or, in other words, to effect a complete removal of the juices—saccharine and others—which the wood may contain.

Buffon and Duhammel advocate the removal of the bark one year before felling, in order that the sap may be driven or evaporated from the sap-wood, thus rendering it hard like the heart-wood. On the other hand, it is contended that this operation causes the tree to die and impairs the elasticity of the wood. At all events, the pores of the sap-wood will remain open, thus rendering it more spongy and less efficient in the rearing of structures. To allow a freer egress of the sap, some have advocated making an incision in and around the trunk, leaving a stem large enough to support the tree. In practice this has been found not to be beneficial, and dangerous in case of high winds. The extraneous matter has been removed successfully by placing the logs in running water, after which they should be placed so as to obtain the freest exposure to the air.

A few interesting and important facts may be deduced from the foregoing.

1. The longer the time that a tree is in growing, provided that it has not passed its maturity and begun to decay, the denser the wood becomes.
2. Generally speaking, the denser the wood, the stronger it becomes.
3. The strongest timber is found in the lowest part of the tree.
4. The straighter the grain, the stronger the timber.

The Architectural Convention.

FROM THE ARCHITECTURAL ASSOCIATION OF DES MOINES.

DES MOINES, Ia., August 25, 1884.

To the Editors of the Inland Architect:

Your announcement of a call for a meeting of all architects, at Chicago, for the perfecting of architectural organization in America, was received by this association with hearty approval.

It is indeed time that the profession be thoroughly organized.

Architect Gay's generous and timely offer should guarantee a large convention.

The profession should not be divided by sectional lines, since many of its most valuable members have long been connected with the A. I. A., and would be interested, and of great service in perfecting a *broader organization* than the Institute has proved to be.

If the profession will act upon your suggestion, as to the interchange of thought upon points in need of consideration, it will greatly facilitate the work of the convention. Very respectfully,

E. H. TAYLOR, Sec'y.

The American Architect on the Convention.

THE INLAND ARCHITECT AND BUILDER announces a call for a convention of Western architects, to meet at Chicago on the second Wednesday in November next. The invitation is addressed to all members of the profession in the country, but is more particularly intended for those of the South and West, who find it difficult to avail themselves of the advantages of the meetings of the American Institute of Architects, and yet need, and know that they need, the help of association with others of the profession. Within a few years, under the federal constitution of the Institute, a considerable number of local societies and chapters have been formed west of the Alleghanies, but it is a long distance from Indianapolis or St. Paul to Albany or Newport, and the benefits resulting from the mutual acquaintance and support of a large body of the profession must almost necessarily be sought in such conventions as that which is now proposed. We trust that the response to the invitation will be general, and are sure that the Western convention will have the best wishes of all architects in the East, and, unless the invitation should be made less general, some of them are not unlikely to make an effort to express in person their fraternal sentiments.—*The American Architect and Building News*, Aug. 30.

English Competitions.

THE Architectural Association of Des Moines, in the following circular, advances another step in its systematic plan to show the proper method of conducting architectural competitions. We are watching the development of the plan with much interest, as are doubtless our readers.—[EDITORS, INLAND ARCHITECT AND BUILDER.]

Two British competitions that occurred about a year ago should be noted by American architects. The first illustrates the workings of that "expert assessor system" when even a building as greatly to be desired as a museum of science and art is to be designed. It was intended that this museum should imitate in Ireland the working of the South Kensington in England. South Kensington has Godfreid Semper to thank for anything worthy of imitation about it: whom the revolutions of '48 drove out into the English fog. Dublin, however, could see no farther than South Kensington, and received all data from that source.

The judges, or, rather, "Committee of Selection," as they were not capable of judging, were five "eminent gentlemen," of whom the Irish architects make no complaint, but they do "resent" the appointment of two royal engineers as assessors. To their cry of too much assessorship, as they only wanted one and he an "independent" architectural assessor (it was to them not a matter of ability, it seems), they are answered in a letter which it is claimed all English architects will "resent." The letter states: "I am to say that it appears to my lords that the assistance which the Royal Institute suggests should be secured through the advice of a professional assessor would in effect be realized in the most independent and trustworthy manner though such a committee as was appointed." The letter of Sir Edmund Beckett shows the disgust, instead of resentment, that begins to show itself among the "honorable associates" of this renowned "Institute."

The real, unadulterated English competition, without any "R. E." interference, is an amusing spectacle. With apparently no goal before them, they seem like badly trained athletes, each one pushing in his own direction until out of wind. One reluctantly admits he did not go quite so far as the first, perhaps, but he claims the prize from having traveled over rougher ground—more truly, English ground; a third claims that he has most dust upon his clothes. They are such competitions as that of which the French sing in "La Belle Helène:" Paris must give the prize of beauty to Juno because of the gorgeous plumage of her peacock; Minerva merits it because of her prudery; Venus gets it by her bribery; the end a scandal and a row that only Anglo-Saxon architects can hope to ever equal.

The second competition is, therefore, all the more remarkable as an illustration of the methods that must be adopted to guide competitions into a safe channel. This is for the Nottingham Municipal Buildings, where Americans, at least, would expect "politics" to have full sway. The continental double-competition system was adopted. The architects were not put into straight-jackets; they even chose the one expert judge (or "referee," as they call him, judgment and justice being still beyond their comprehension). The corporation merely claimed the right to name the list of architects (not a very long one) from which competitors must choose their referee. The eight designs considered worthy of a second competition resulted in a tie for the first honor, yet no scandal seems to have been raised by even so imperfect a competition. In truth, such a judgment was necessary, from the profession in England being without a goal or determined line of advance. The first and second prizes were lumped and divided between the best planned design and the best "Betsy-Anne" exterior.

Does not the result of this latter competition encourage American architects who take pride in their profession and have a sincere desire for its advancement, to investigate for themselves the merits of the *complete* continental system?

Respectfully submitted,

E. H. TAYLOR,
Secretary A. A. of D. M.

J. S. BLAKE,
President.

Aug. 25, 1884.

SCHEDULES in the assignment of the lumber firm of Drys & Elliott, Minneapolis, Minn., show liabilities of $189,500 and assets of $132,000.

Our Illustrations.

Pages 25 and 29, Residence for Mr. Chas. K. Miller, now being erected on North State street, near Schiller, from plans by architect A. M. F. Colton. The building is two stories high, with mansard roof, fronts of St. Louis hydraulic pressed brick with Connecticut brown stone trimmings, and a large carved panel on the second story, of terra-cotta. The porch is of wood with iron railings. The roof is red slate and the mansard black slate, making a very striking contrast. The first floor arrangement consists of hall, parlor, sitting-room, kitchen, etc. The interior of the first and second stories will be finished with various kinds of hard-wood. The main hall will be finished with high paneled wainscot of quarter-sawed oak, newels and stair railings of the same material, floor of hall will be of red oak with hard finish. Parlor finished in mahogany, sitting-room in sycamore, and dining-room in quarter sawed oak, each room having mantel of same material as the finish. The second story has four large sleeping rooms with dressing rooms, closets, etc., also sewing room and large linen closet, all finished in cherry. The attic contains two large rooms in front, and servants' apartments in the rear, all finished in pine. It is so arranged that the working department of the house can be entirely shut off from the front rooms. The whole house will be heated by steam, and special attention has been given to the plumbing and ventilation, strictly first-class work being done in all its branches. The entire building, including the barn on rear of lot will cost $30,000, and will be a model of beauty and good workmanship.

Supplement. Office building for the Royal Insurance Company of Liverpool, England, at Chicago. Quincy street and Jackson street fronts. W. W. Boyington, architect. The frontage upon either street is 100 feet and the distance between fronts 165 feet, and the height 165 feet. It is ten stories including a high basement. The Jackson street front is composed entirely of red or rose-colored granite, the basement being rock-faced with polished pilasters around the entrance, which has the title of the company carved in a single stone 23 feet long above, and the royal arms are carved in bas-relief above the cornice. The effect of the granite in cornice and capitals is very substantial, while the color of the granite imparts a warmth of color not frequently gained from a granite facade. The Quincy street front is quite different in design and treatment, the basement and first two stories are of red sandstone with Anderson pressed brick above, trimmed with red sandstone, and ornamented with terra-cotta. The building has been thoroughly fire-proofed with iron beams and girders, fire-proofed with hollow tile, and partitions also of this material. The heating is done by steam, and this, with the plumbing, drainage, etc., are especial features, each in their way as perfect as the best knowledge and the most advanced methods can provide. The building will be ready for occupancy by May 1st, 1885. The cost when completed is estimated at $500,000.

Supplement. Office Building for the Home Insurance Company, Chicago. W. L. B. Jenney, architect. This building is being erected on the northeast corner of Adams and LaSalle streets, Chicago, for the Home Insurance Company, one of the leading fire insurance companies of New York, to be occupied for general office purposes and the Western headquarters of the company, in charge of the company's agents, Messrs. Ducat & Lyon, so well known in Chicago because of their prompt and full payment of all losses after the great fire. The building occupies 138 feet on LaSalle street and 96 feet on Adams street, and is nine stories and basement in height—a total of 150 feet from the sidewalk to the top of the cornice. The basement is 10 feet high in the clear; the first floor, which will be fitted for banking purposes, 19 feet; the second 13 feet, the third and fourth 12 feet, the fifth, sixth, seventh and eighth 11 feet, while the ninth story will be one large hall 18 feet high, with galleries, and fitted for the Western department of the Home Insurance Company.

The foundations are calculated for a permanent weight of two tons per square foot, the borings showing soft clay to the depth of 20 feet, the extent of the examination, and are isolated piers carefully proportioned to the weight they are to carry. They are composed of 2 feet of concrete, dimension stone and a layer of square rubble stone. The pedestal, formed from the basement and first story, is of Fox Island granite, the walls rock-faced, but with considerable carving at entrances. The main entrance displays four of the finest polished granite columns ever placed in the West. The walls above are composed of dark red Trenton pressed brick—one of the finest pressed bricks found in any market—set in red mortar and trimmed with panels of Perth Amboy terra-cotta, and red sandstone from Vert Island, Lake Superior, a hard sandstone, fine in color, very strong, weathers well and can be procured in any quantity and in blocks as large as can be handled. The construction is especially designed for a tall, heavy building set upon a compressible foundation, which this is. Such construction must be elastic, as settlements must take place, and although every care is taken to make settlements uniform, there will be more or less inequality, and to counteract these there must be elasticity in the construction. It is also necessary to have all rooms as well lighted as is possible, and this is mainly accomplished by having the piers cut away to the minimum of strength. To satisfy these two requirements the girders are carried on square iron columns built into the brick piers and connected at the top of each window by lintels. Each floor of beams and girders is tied together and also tied to all the columns, thus forming a complete network supplemented by heavy hoop-iron, built into the brickwork in every place where increased bond or tie is desired, and also every stone is clamped or anchored so that settlement will produce as little displacement as possible. The interior, including all the iron columns, girders, beams, etc., will be fireproofed by the system of hollow fireclay tile arches, partitions, etc., placed by the Wight Fireproofing Company. The finish will be in hard-woods, and the exterior balconies, the balustrade on the roof, etc., will be of elaborate magnetic oxide ironwork, a material especially adapted for these purposes, by Poulson & Edgar, of Brooklyn. The designs for the main stairway are very artistic, and are to be carried out in this material. The construction of the building is in the hands of some of the most skillful contractors in the country, and the building, when completed, will not have its superior among the insurance buildings of the country. The arrangement of offices are thorough and complete. Six Hale Hydraulic elevators will give rapid and easy access to all floors, and the building will, when finished, cost not less than $600,000.

Architectural and Building Notes.

The distinguished Bavarian sculptor, Joseph Echteler, who has received from the Munich Academy, of which he is a member, two great medals for art and science, can produce a life-sized portrait from nature in from three to seven hours. He is thirty-one years old.

The Baptist Theological Seminary at Morgan Park, just south of the city, proposes to build three new buildings within as many years, costing $75,000. The chief building, for chapel and additional dormitories, and costing $35,000, is to be commenced very shortly.

The architect of the Lenox Library Building and of W. K. Vanderbilt's house, in New York, Mr. Richard M. Hunt, has received the decoration of the Legion of Honor from the republic of France. He was the first American student of architecture at the Paris School of Fine Arts.

Architect A. M. F. Colton, has furnished plans for the McCormick estate, for a double building on the northeast corner of South Water and Clark streets, consisting of four stories and a high hall for society purposes, and to cost $25,000; material, pressed brick and trimmings of McArthur stone. John M. Dunphy & Co., contractors.

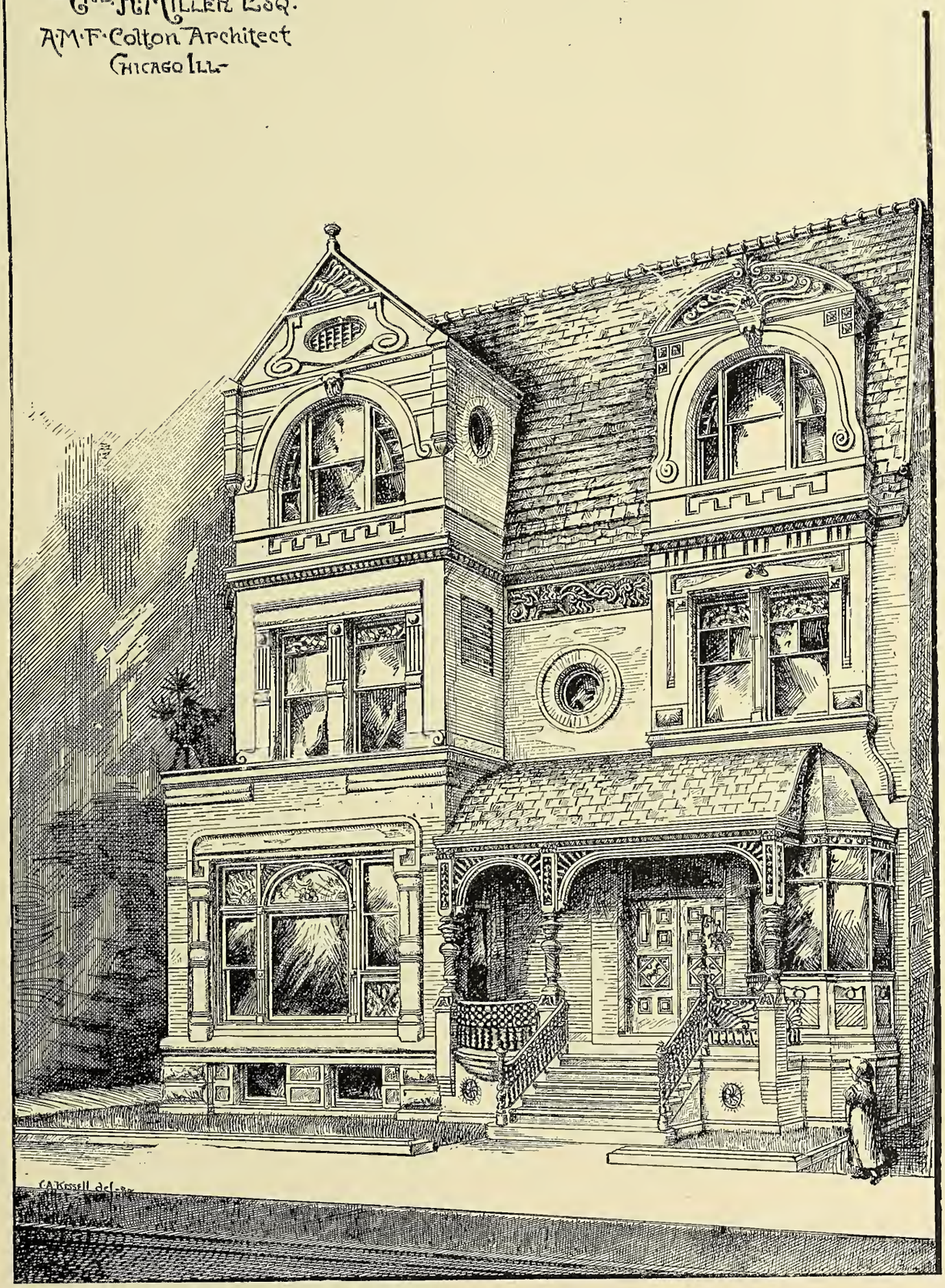
St. Elizabeth's Church and school, at State and Forty-third streets, below the limits, is about finished at a cost of $40,000, the building being of pressed brick and stone, and consisting of a large school below and church above, the latter also to be used ultimately for school purposes. The church is quite impressive and a good example of modified gothic.

The matter of beginning work on the Minneapolis post-office building remains unsettled. The Solicitor of the Treasury holds that the estimates cannot exceed the amount authorized by Congress, and if this decision should prevail, work cannot begin under the plans just adopted. This decision, however, is not final, and may be overruled by the Secretary of the Treasury. It has been stated repeatedly that Congress has lifted the limitation fixed by the original law for the cost of the building, and has authorized an extra appropriation of $75,000. The limitation having been removed, it is believed the Secretary of the Treasury will order work to begin, and ask Congress to provide for whatever deficiency may arise under the present estimates. Subordinate officials in Supervising Architect Bell's office say that he awaits the action of the Secretary, which, he thinks, will remove all obstacles in the way of beginning work on the building at once.

From official sources it is learned that quite the largest warehouse yet projected in the West is that for which plans have been drawn for the South Chicago Dock Company, at their slips at One Hundreth street, South Chicago, on docks Numbers 1 and 2. The slips, two in number, are 1,534 feet long by 252 feet wide, and the buildings will be three stories in height, the floors being 19, 15 and 14 feet respectively apart, and will consume about 8,000,000 brick. The foundations will be on piles driven in "made land," and will use 8,000 piles. Upon the piles will be placed a solid foundation of rubble for brick work to rest upon. The roofs will be of slate, and will be surmounted by long trunk skylights to light and ventilate the interior. The buildings will be divided into ten compartments. On the slip side will be a platform 16 feet wide, and on the opposite side will be track connections with each of the ten storehouses. Each of these will accommodate eight cars. Each storeroom is also equipped with two hydraulic elevators, each of 6,000 pounds capacity, and protection against fire will be fully secured in the way of stand-pipes, duplicate pumps, boilers, etc. The ends of the buildings will be largely of glass, giving perfect light throughout. These warehouses will be used by parties doing heavy business in iron, heavy hardware, whiskey, etc., where commodious accommodations are required and where the freight can be landed from the vessel without transfer to warehouse, and there will be connection by the belt line railway with all railroads. The improvement will be a marked advance in the building of warehouses in the West, and its erection will draw others to see the advantages of this port for marine freight purposes. The two buildings entire, fully equipped with elevators, fire-protection, machinery, etc., will be a little less than $500,000 each.

Architect Otto Matz has prepared the plans for the new hospital for women and children, to be built at the corner of Adams and Paulina streets, and contracts for the work, which will be vigorously pushed, are being let. The main building, five stories and basement high, and fronting 150 feet on Adams and 44 feet on Paulina street, will be of St. Louis hydraulic brick, with red sandstone and terra-cotta trimmings in a plain and substantial but very tasteful style of architecture. Surmounting the whole, will be a very high mansard roof of peach-bottom slate, having numerous large dormer windows. The structure will have an ornamental central pavilion on the Adams street front, and will be flanked on either end by lofty octagonal towers overtopping projecting bay-windows. The first floor, reached by massive granite steps through a handsome doorway and capacious hall, will be occupied by the directors', matron's, physicians', apothecary's, engineer's, servants', dining and bath rooms, together with an accident ward, kitchen, laundry, the dispensary and examining and waiting rooms. The second floor will be occupied by small wards for twenty pay patients and five nurses' rooms, together with bath-rooms, wardrobes, etc. The third and fourth floors will each contain two eight-bed wards and five smaller wards, with nurses' rooms, etc. The fifth floor is given up to a large childrens' ward and nurses' rooms, etc. The operating room is in the central pavilion, and is well lighted and ventilated. Access is had to the different floors by broad, easy stairways and a passenger elevator. Fire-escapes in the form of open stairs are also to be provided, leading into the alley to the rear. The steam-heating is to be by direct and indirect radiation. A detached structure 25 by 45 feet in size, connected with the main building by a tunnel, accommodates the boiler, etc. It is intended to have the building completed by January 1.

RESIDENCE FOR
CHAS. K. MILLER ESQ.
A. M. F. COLTON ARCHITECT
CHICAGO ILL.



Lumber Notes.

DULUTH, Minn., suffered a loss of about $140,000 by a conflagration in its lumber mills August 23.

It is estimated that upwards of 5,000 acres were burned over by the reeent forest fire near East Tawas, Mich. Several buildings were also destroyed, and lives are reported to have been lost.

THE Tacoma, W. T., Mill Company finds it necessary to blast some of its largest logs, as their great size and weight make them very difficult to handle. Several logs were thus split that measured between seven and eight feet in diameter.

JOHN DUBOIS, of Dubois, Clearfield county, Pa , is, perhaps, the wealthiest lumberman in the world. His wealth is estimated at $14,000,000. He employs six hundred men in his various lumber mills, and one thousand in getting his lumber from the woods.

THE Oregon Southern Improvement Company, Coos Bay, Ore., has placed its order with the Stearns Manufacturing Company, Erie, Pa., for the sawing machinery for its new mill. This mill, when completed, will be one of the finest on the Pacific coast.

THE Big Woods of Minnesota are rightly named, for they cover 5,000 square miles, or 3,200,000 acres of surface. These woods contain only hardwood growths, ineluding white and blaek oak, maple, hickory, basswood, elm, cottonwood, tamarack, and enough other varieties to make an aggregate of over thirty different kinds. The hardwood tract extends in a belt across the middle of the state, and surrounding its northeastern corner is an immense pine region eovering 21,000 square miles, or 13,440,000 square acres.—*Wood-Worker.*

AT the convention of the lumbermen of the Northwest, held in Chicago August 20, an aggregate capital of $500,000,000, and an annual production of $250,000,000, was represented. All the officers of the association were reëlected. It was deeided to hold the next regular meeting at La Crosse, Wis., in May, 1885. A resolution was adopted to elose the mills not later than November 1, and owing to the amount of lumber and logs now on hand, they will not get out over 60 per cent of the amount of the eut of 1883 the coming winter.

THE following is a statement of the logs and lumber in the St. Croix lumber district at Stillwater.

	Feet.
Amount sawed	80,000,000
Logs shipped	80,000,000
Logs on hand below the St. Croix boom	125,000,000
Logs above the boom	40,000,000
Total	325,000,000

Besides the above there is the following amount of manufactured lumber on hand, including 10,000,000 shingles at Cloquet Mills and 7,000,000 lath on the St. Louis river, belonging to the C. N. Nelson Lumber Co.

	Feet.
Lumber	58,100,000
Shingles	23,750,000
Lath	10,300,000

Builders' Exchange Notes.

THE Pullman Brick Company are far exceeding the products of last year.

THOMAS E. COURTNEY, is about to build lime kilns for Henry Martin, near Summit.

THOMAS NICHOLSON is rapidly pushing up the new Beidler building, on West Washington street.

MORTIMER & TAPPER are working like beavers on the Home building, corner of La Salle and Adams streets.

D. H. HAYES was the lowest bidder on two engine-houses to be built for the city, one being on Curtis and one on Halsted streets.

THE success of the Exchange is indicated by secretary's books showing, since the opening, June 26, 90 applications and a total membership to date of 489.

SEVERAL of the north-side brick manufacturers have preferred charges against those who have violated their agreement, and in all probability their expulsion will be demanded.

THE deaths of two very energetic members is noted, Davis Studley, earpenter-eontractor and Matthew Kiely, of Kiely & Voss, iron manufacturers. Appropriate action being taken thereon by the Exchange.

THE Chicago Brick, Tile and Terra-Cotta Company of Chicago, have taken out papers to organize. Prominent in connection with the company is Mr. E. H. Callaway, an energetic worker, who is bound to make a suceess of it.

JAMES JOHN has very nearly completed the fireproofing of the Cooper & Carson building, on Dearborn street, with his new method, which speaks for itself, several leading architeets from St. Louis having inspected and spoken very highly of it.

COL. W. H. CHENOWETH left for an extended trip up north, last Wednesday, September 3, so for the next three weeks his cheerful face will be missed. We can guarantee that those he eomes in contact with will hear some of his good stories, and we sincerely hope that he will have an enjoyable time. During his absence his sons will take care of the business in Chicago.

THROUGH the kind invitation of Mr. E. W. Henricks, a number of the prominent builders of the Exchange were invited out to the yard, and were also shown the sights of Pullman, when the "Twilight" was boarded, and a cruise was taken around the lake and up the river to Wildwood, to the summer residence of Mr. and Mrs. E. W. Henricks, where an elegant lunch was served, and as it was almost 2.30 P M. when the boat arrived, it may be surmised that justiee was done, as provisions were made for sixty, and forty seemed to be too many for it. After lunch a general good time was had and a few harmless looking bottles were emptied. At four o'clock the boat was ready to start, and down the river they went, feeling as happy as larks, such expressions as these were heard, "never spent such a day in twenty years," "here's to the moon," etc. Life preservers were brought in use, as a lively discussion took place regarding the presidential candidates, when a vote was taken, which resulted as follows: Cleveland 23, Blaine, 10. On the whole, an elegant time was had and thanks were extended to Mr. and Mrs. Henricks, and to Messrs. Whiting and McGinity.

New Publications.

CATALOGUE OF MATERIAL AND METHODS OF CONSTRUCTION, Published by Messrs. KNISELY & MILLER, Chicago.

Among the trade catalogues which come under notice from time to time this is at once one of the most interesting and instruetive. The firm who publish it are evidently gentlemen of taste as well as skill, for the illustrations represent some of the finest residences of Chicago, and in the line of public buildings the list includes some of the most important depots and similar structures in the country. A majority of these illustrations are from sketches by Paul C. Lautrup, whose prominence as an architectural draughtsman is almost national, and are from an architectural standpoint in the highest degree artistic. They are over twenty in number and show in every case some department of work executed by Messrs. Knisely & Miller. Interspersed among these sketches are cuts of different classes of work, in whieh are included sections of galvanized iron cornices, window-caps, finials, dormers, eorrugated iron for roofing and siding, fire-proof floors, iron lath, slate, tin and iron roofing, the Hayes Patent Ventilating Fire and Water-proof Skylights, Ventilators, etc.; the variety and extent of which cannot be enumerated in the limited space given to this notice. Full directions for ordering, earefully tabulated and systematically arranged, form an important feature, which, together with brief descriptions of the cuts, are a valuable feature of the catalogue. Special instructions for the preparing of roofs for corrugated iron, and for laying it, valuable remarks upon the quality and uses of slate, and the same in regard to tin roofs, the points of superiority claimed by the Hayes Patent Skylight, the variety and uses of which are endless, and many other departments, make the work interesting and valuable to every architect and builder. The pamphlet contains 112 pages, and besides its value as an index of material, it is from first to last gotten up with superior claims for typographical and lithographical merit, and it is a pleasure to find, among the many works gotten up for a like purpose, that of spreading trade influence, one that has artistic merit and which does not offend the reader's sense of order by an ill-arranged appearance or his sense of grammatical correctness by crudely written and badly constructed sentences. It is a work of which the promoters may well be proud and satisfied with when they count the cost which such a work must necessarily involve, but which will return to them many-fold because of its attractiveness and genuine value.

ARCHITECTURAL PICTURE MAKING WITH PEN AND INK, by BENJAMIN LINFOOT, architect, Philadelphia, with illustrations by the author, A.D. 1884. First Edition, Volume I. Muslin, "Old Ebor" folios. 719 Walnut street, Philadelphia.

An idea of the scope of this work may be conveyed more clearly by the headings of the several chapters: The Necessity of a Knowledge of Pen and Ink Drawing; The Elements of Pictorial Light and Shade and Balanee; The Qualities of Size, Location, Distance and Balance, (as expressed by the introduction of Figures and Still Life); On Designing a Synoptical Chart, (the introduction and placing of figures and other incident); Outlining; Shading; Skies (Realistic Representation); Foliage, Herbage, etc., etc.; Methods and Appliances; Figures (Shall they be Good Copies or Bad Originals?); Comparative Examples; which ehapters are followed by a note, in whieh the author says, "they are the crystalized result of deductions and their applications during a great many years of hard work." The suggestions being the outgrowth of practical work will doubtless be of value to arehitectural draughtsmen, and especially the younger members of the profession. The book is printed on heavy plate paper, and is a beautiful specimen of "the art preservative." In addition to numerous illustrations which accompany the text, there are thirty-two full page plates which, to the student, will be found very useful and suggestive studies, as they are designed to show defective styles in comparison with the correct.

THE *Slate Trade Journal*, published by A. P. Berlin and H. S. Bachman, editors and proprietors, at Easton, Pa., is a trade paper, devoted to the interests of the trade indicated by its name. It is a new enterprise, and gives in its third number substantial evidenee that it supplies a "long felt want." The subject-matter indicates a practical knowledge of the business the paper was projeeted to subserve, and it contains a great deal of information concerning the production and preparation of slate for building and other purposes, together with many items relating to the trade generally. It is well printed, well edited, and is furnished to subscribers at $2 per year.

Mosaics.

HAY & PRENTICE have contracted for the steam-heating of the Northwestern Safe & Trust Company's office building, and also for the Henderson & Blair building.

AMONG recent contracts taken by the Wight Fireproofing Company are, the fireproof roof for the Museum of Art at Cincinnati, lining the walls of Geo. Buellen's malt house, Chicago, the scagliola work on the new Board of Trade building, Chicago. This company have just completed the fireproofing of the columns in the reconstruction of the American Express building, Chicago.

THE establishment of E. Baggot has been greatly enlarged during the past few weeks, and the stoek of gas fixtures greatly increased, both in quantity and in variety of design. The projection of a show-window artistically arranged, upon the street corner, containing some valuable samples of gas-fixtures is one of the more noticeable features. These improvements are in harmony with the firm's enterprise and their willingness to exhibit their beautiful designs in brass, bronze and other metals.

THE Chicago Murano Art Glass Company have broken ground for their works, which they hope to have in working order in sixty days. They will be located on the belt line railroad, southwest of the city, at the crossing of Sixty-third street. This industry promises well, and should revive an art that has produced some of the most beautiful works of antiquity, and in modern hands should add greatly to our decorative facilities.

ONE of the finest specimens of finished silver plating for architectural purposes to be seen in the West is the recently completed stair railing in the Palmer House baths leading to the cooling rooms and baths. This is of heavy plate, exceedingly ornamental, and of finished workmanship, and cost, together with the silver rails around the plunge-baths, over $1,800. The work was executed under the supervision of C. W. Trip, whose connection with the firm of L. S. Baldwin & Co. has made him known throughout the country, especially in the line of theatre silverwork, this firm having for many years made a specialty of silver and bronze trimmings for theatres, as well as for domestic work, in which field the work of Mr. Trip has been especially noticed and recognized.

Editors Inland Architect and Builder.—DEAR SIRS:—Referring to the accompanying circular of The New York Iron Roofing and Paint Works, we wish to say that having, through our extensive business in Corrugated Iron, much enquiry for roofing of flat sheets, and having for years known well of the roofing sold by The New York Iron Roofing and Paint Works, which we consider unequalled for effectiveness, as is stated fully in accompanying pamphlet, we have, at large cost, bought out that establishment. We only ask that we receive equal patronage to that of our predecessors, guaranteeing to maintain the hitherto high character of this roofing to the fullest extent. With this extension of our manufactures we are now undoubtedly the largest manufacturers of metallic roofing and siding in the United States, and having unequaled facilities, we offer the most complete line of inducements to purchasers. Respectfully yours, The Cincinnati Corrugating Co. CINCINNATI, July 10, 1884.—*To whom it may concern:* This is to certify that we have this day sold our entire interest, patents, franchises, machinery and good-will in the iron roofing business to The Cincinnati Corrugating Co., and recommend all our patrons to extend the same courtesies and patronage to said company that have heretofore been so generously extended to us. Respectfully yours, The New York Iron Roofing and Paint Works, Chas. Stewart, Propr.

Inventive Genius in Building.

302,581. Burglar-Alarm. Leonard D. North, Hannibal H. Ingham and Frank W Ingham, Chicago, Ill.
302,582. Pneumatic Door-Check. Gustavus S. Perkins, Hartford, Conn.
302,583. Water-Closet Joint. Charles F. Pike, Philadelphia, Pa.
302,584. Mercury-Seal Trap. Charles F. Pike, Philadelphia, Pa.
302,585. Trap for Washstands, etc. Charles F. Pike, Philadelphia, Pa.
302,586. Metallic Shingle. Geo. C. Plummer, Brimfield, Ill.
302,589. Elevator. Frank M. Reynolds and Geo. C. Tewksbury, Newark, N. J.
302,592. Water-Closet. James Laughland, Roxburgh, and Wilson Glover, Charleston, S. C.
302,609. Farmer's and Drainer's Combined Level and Plane-Table. Harry Wells, Zebulon, Ga.
302,621. Chimney. Leonard E. Clawson, San Francisco, Cal.
302,628. Door-Hanger. Henry Fleming, Kansas City, Mo.
302,638. Weather-Board Gauge. John T. Shank, Springfield, Mo.
302,646. Composition and Manufacture of Brick or Artificial Stone. George R. Bare and James A. Douglass, Columbiana, O.
302,666. Water-Closet and Trap. Samuel G. McFarland, New York, N. Y.
302,667. Trap for Water-Closets. Samuel G. McFarland, New York, N. Y.
302,702. Steam-Radiator. Gustav Blau, Jr., Jersey City, N. J.
302,713. Cesspool. Eugene Dieterich, Anniston, Ala.
302,714. Fire-Proof Shutter. William H. Dolman, New York, N. Y.
302,721. Elevator. John Foreman, Pottstown, Pa.
302,728. Waste-Pipe Trap. Thomas C. Hargrave, Minneapolis, Minn.
302,742. Composition for Filling Wood. Michael Kunz, Oberhausen-Augsburg, Germany.
302,743. Composition for Polishing Wood. Michael Kunz, Oberhausen-Augsburg, Germany.
302,765. Hollow Auger. Samuel Harmon Newcomb, Port Williams, Nova Scotia, Can.
302,767. Attachment for Squares for Builders' and Joiners' Use. Andrew G. Olsen and John McFarlane, Duluth, Minn.
302,771. Lumber-Elevator. John Paul, La Crosse, Wis.
302,776. Elevator. Charles E. Reid, Brooklyn, N. Y.
302,801. Cutter for Dressing Stone. Frank Trier, Westminster, County of Middlesex, Eng.
302,824. Stay-Roller for Doors. Jacob Brinkerhoff, Auburn, N. Y.
302,842. Monkey-Wrench. Samuel H. Heginbottom, Robert C. Hayton and William H. Hayton, East Saginaw, Mich.
302,843. Submerged Force-Pump. Louis Herbert, Hickville, Cal.
302,847. Door-Hanger. Wm. E. Jaques, Cleveland, O.
302,858. Lime-Bin. Truman T. Moulton, Neenah, Wis.
302,872. Brick-Machine. William H. Stewart, Booneville, Mo.
302,887. Brick-Machine. Frances C. Burrell, La Salle, Ill.
302,905. Bolt-Hinge. Richard H. Garland, Chicago, Ill.
302,913. Heating Apparatus. Isaac Kirk, Warren, O.
302,916. Fly-Screen-Door Attachment. Phœbe R. Lamborn, West Liberty, Ia.
302,942. Paper-Floor Block. William E. Rockwood, Indianapolis, Ind.
302,943. Paper Floor. William E. Rockwood, Indianapolis, Ind.
303,009. Opaque or Semi-Transparent Enameled Glass or Colored Glass. Ernst Franz Wilhelm Hirsch, Radeburg, Saxony, Germany.
303,023. Earth-Closet. Cyrus D. Lane, Batavia, N. Y.
303,077. Combined Rule and Square. George D. Umland, Osceola Mills, Wis.
303,174. Heating Apparatus. Jas. R. Mason, New York, N. Y.
303,181. Mason's and Builder's Scaffold. Orrin Osborn, Gloversville, N. Y.
303,193-194. Self-Closing Hatchway. Richard D. Thackston, St. Louis, Mo.
303,198. Kiln for Burning Bricks, Tiles, etc. Garrard Davis Wilgus, Lexington, Ky.
303,213. Compound for Making Bricks, Artificial Stone, etc. Henry A. Cooke, Ocala, Fla.
303,247. Indicator for Elevators. Thomas S. Young, New York, N. Y.
303,610. Knob Attachment. James Reuben Binns, South Windham, Conn.
303,615. Pipe-Joint Packing. Cotter T. Bride, Washington, D. C.
303,623. Chimney-Cap. Robert H. Craighill, Buffalo, N. Y.
303,640. Sink-Trap. Benjamin Holland, Jr., Providence, R. I.
303,830. Portable Caisson for Use in Building Subaqueous Structures. Henry Flad, St. Louis, Mo.
303,846. Water-Closet Valve. Wm. J. Hearn, New York, N. Y.
303,856. Combination Fire-Proof Arch. Henry G. Isaacs, St. Louis, Mo.
303,858. Basin-Trap Clearer. James E. Kelsey, Brooklyn, N. Y.
303,861. Combination-Tool for Carpenters. Peder O. King, Valley City, Dak.
303,888. Spike-Extractor. Edgar T. Sharp, Boston, Mass.
303,912. Steam-Heater. Jerome L. Boyer, Columbia, Pa.

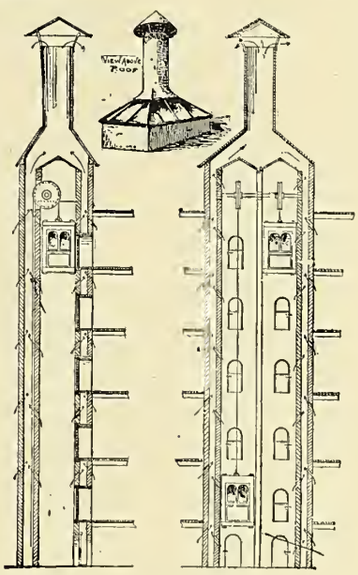
PUBLISHER'S DEPARTMENT.

Combined Fireproof Elevator and Ventilating Shaft.

THE erection of the high buildings of the present day has developed the fact that pretty positive assurances of incombustive construction must be given to a house-renting public before tenants will venture to occupy floors above the fourth.

Within the past twelve months, incipient fires, occurring in well fireproofed structures in New York City, also show that a comparatively insignificant blaze, as the burning of a small pile of fuel in the basement, or of the furniture and wood-work in a single room, endangers the lives of occupants of a large house, by reason of the smoke and heated air originated by it, which quickly permeates every nook and corner, through elevator and dumb-waiter shafts, that afford easy conduction in whatever part of the building they may be located.

These shafts usually extend from basement to attic, and are sometimes merely holes, cut through intervening floors, and surrounded by guards at each, but oftener are closed—encased in wood-work, which in time becomes impregnated with grease, from the enclosed running gear, the slightest touch of a flame will instantly ignite its entire length, into an instantaneous blaze, and seemingly at the same instant the whole building is enwrapped in flames.



C. C. Gilman, of Eldora, Iowa, the inventor of terra-cotta lumber, has recently patented a combined elevator and air shaft, without which a *fire-proofed house cannot be fire-proof*, a description of which is worthy the attention of the reader. The accompanying cut represents front and lateral views of the invention, located in a six-storied building. The interior structure is that of the elevator shaft proper, and with its walls of terra-cotta lumber, or brick, and iron doors, is, of course, incombustible.

Closed at the top by a glass roof, the air admitted by the opening of the doors, and otherwise, escapes through apertures in the walls, into the air passages surrounding. Its car may be lighted with oil or gas.

The exterior walls belong to the air or ventilating shaft, are built of brick or terra-cotta lumber laid in cement, two feet or more distant from the walls of the elevator shaft, which it encloses.

Apertures in its walls allow egress of foul air and of gas from the halls and passages of the building, through which it makes its way, in fact *compels*, a ventilation from every room, which may have an open transom, for its top, narrowed above the roof to a much smaller size, becomes in fact a high chimney, or stack, such as used for creating a draught for steam furnaces. The intensity of the draught being regulated by its height. Its top is surmounted by a metal cap to exclude rain and wind.

The effect is obvious. The vacuum occasioned by the rarified atmosphere at the top of the chimney causes a constant rush of air up the shaft, which must be fed from below. Ordinarily this supplies ventilation. In the event of fire it affords a rapid escape of smoke and heat, not only from the elevator shaft, but from rooms surrounding.

A nominal royalty for the use of the invention is charged by the Gilman Porous Terra-Cotta Co., Henry Markell, Secretary, No. 1 Broadway, New York City, who advertises in another column.

Synopsis of Building News.

Alliance, O.—Architect Guy Tilden reports: For M. S. Hawkins, two-story, slate-roof frame residence, 38 by 48 feet, cost $6,000; under way; Chas. McCash, builder. For Mr. Samuel Grove, Sr., two-story, slate-roof, frame residence, 40 by 52 feet, cost $6,000; under way; Robison & McCash, builders. For Mr. S. J. Williams, two-story, slate-roof, brick residence, 48 by 46 feet, cost $12,000; under way. For Silver & Deming Manufacturing Co., three-story factory building, brick, slate roof, 50 by 127 feet, cost $12,000; projected; contracts to let. For same company, two-story factory building, brick, slate roof, 37 by 184 feet, cost $8,000; projected; contracts to let. For Stark and Columbiana Co. Nursery, two-story brick building, slate roof, 44 by 37 feet, cost $7,000; projected; contracts to let.

Atlanta, Ga.—Architects Bruce & Morgan report: For the Baptist Society of Monroe, Ga., a frame church building, 40 by 75 feet, cost $5,000; James Smith, builder. At Americus, Ga., the Barlow Block, brick store building, 182 by 90 feet, cost $18,000; under way; J. M. Wheatley, builder. At Newman, Ga., for Mr. W. B. Berry, a two-story brick bank building, 25 by 80 feet, cost $5,000; under way; J. S. Westbrook, builder. At Atlanta, for F. M. Coker, a two-story brick bank building, 30 by 70 feet, cost

$6,000; under way. For M. C. Kiser, a three-story store and office building, 50 by 105 feet, brick and stone construction, cost $18,000; A. McGiloray, contractor. At Lafayette, Ala., the Lafayette High-school building, brick, stone trimming, 60 by 96 feet, cost $15,000; J. S. Westbrook, contractor.

Architects Fay & Eichburg report the Atlanta Chamber of Commerce, five stories, 52 by 120 feet, brick, stone and terra-cotta trimmings, metallic roof, cost $45,000, under way; J. H. Mathews, contractor. For Board of Education at Rome, Ga., three-story brick and stone building, 80 by 58 feet, cost $16,500, under way; Wm. Bensel, contractor. For Mr. L. L. McCarthy, two-story frame residence with brick basement, 40 by 90 feet, cost $5,000; under way. For Mr. J. Menks, two-story brick residence, 46 by 78 feet, stone trimmings and slate roof, cost $6,730, under way; J. V. Bishop, builder. For Mr. I. May, three-story and basement, brick and stone residence, 62 by 96 feet, slate roof, cost about $19,000, under way; work done by the day. For Mr. M. Adler, three-story and basement, brick and stone residence, 57 by 72 feet, cost about $14,000; projected. For Mr. Hunnicutt, a three-story frame building, 60 by 87 feet, stone basement, metal roof, cost about $16,000; under way. For Mr. W. F. Bennett, a two-story frame residence, 37 by 48 feet, cost $4,680; under way. For Mr. T. H. Clark, two-story brick and stone residence, 34 by 70 feet, cost $4,800; under way. For Mrs. C. A. Elliott, a two-story brick and stone residence, 42 by 67 feet, cost about $6,000; projected. For Mr. J. H. Rose, additions to frame dwelling, cost about $3,000. For Mr. J. Regenstein, additions to store building, cost $10,000; projected. For Mr. B. C. Lewis, Tallahassee, Fla., three-story frame residence, 39 by 69 feet, cost about $7,000; under way. For the estate of Mary Felfair, a four-story brick and stone hospital building, 48 by 110 feet, cost $47,000, under way; B. R. Armstrong, of Savannah, Ga., builder.

Ashland, Minn.—Thomas Bardon's new brick bank building, for the Ashland National Bank, is fast nearing completion, and is said to be one of the finest bank buildings in the State. Mr. Bardon has let the contract to build another brick building adjoining the bank building on Second street.

Austin, Minn.—Work has been commenced on the Jones Block. New foundations will be put in, and some $7,000 or $8,000 expended in fitting it up for a fine opera house. The designs for the renovation of the Jones Hall block are completed, and when it is finished will transform the building into an ornament to the city. Workmen are now taking out the foundation and replacing it with Mankato stone.

Bismarck, Dak.—The capitol building as it now stands has cost the contractor $132,000, and he has $6,000 worth of work to do to complete his contract, which he is now proceeding to do. He has received from the commission in cash $103,000 and in the way of accounts assumed or guaranteed by the commission $13,000, making the amount actually paid on the building by the commission $116,000. The contractor's loss on the building will be about $20,000.

Bloomington, Ind.—Business a little slack at present. Architect J. L. Nichols reports: For Showels Bros., one-story frame factory building, 50 by 132 feet, iron roof; one-story brick packing-room, 40 by 132 feet, iron roof; one-story brick finishing room, 50 by 132 feet, iron roof; all under way. The above are to replace the bedstead factory which burned about two weeks since at a loss of about $60,000. For J. C. Robinson, one-story frame cottage, 30 by 33 feet, cost $1,000; under way; S. C. Curry, builder.

Canon City, Colo.—Outlook very favorable. This place builds up steadily, and there is always more or less building going on. Coal mines are being opened up, which will serve to make business more lively soon.

Architect George W. Roe reports: For J. P. Chapman & Co., grist mill, 42 by 60 feet, four-story brick building, tin roof, cost $7,000; nearly completed. South Canon school building, two-story brick building, 36 by 52 feet, cost $8,000; just under roof; C. J. Smith, builder. For Lyman Robinson, two-story residence, 58 by 69 feet, brick with cut-stone trimmings, mansard roof of tin and metallic shingles; foundations just in; will be let in separate contracts. Also one-and-one-half-story brick stable, 47 by 42 feet, tin and metallic shingle roof, cost $2,000; plans just completed. For Mr. F. L. Smith, one-story stone building, 34 by 56 feet, cost $3,500; plans just completed; Nichols & Bradbury, builders. For A. O. U. W. hall, two-story brick, stone front, 44 by 80 feet, cost $7,000; projected. Also a number of small buildings, costing from $600 upwards.

Cheboygan, Mich.—Architect Joseph Cochran reports: The building business has been somewhat dull this season, but with good crops considerable will be done this fall; few good buildings will be erected this year. For First National Bank building, 24 by 100 feet, two stories high, of brick, stone and iron construction; the bank-room is to be finished with black walnut, oak and white marble, cost $16,000; J. W. McGinn, builder. For Mr. T. J. Crunely, a three-story brick hotel building, to be known as The Michigan Exchange, cost $10,000; A. McDonald, builder.

Cheyenne, Wyo. Ter.—Architect J. S. Mathews reports: Although it is duller here than it has been for three or four years at this season, still there is a great activity in the building line, and think it will improve before fall; have several sets of plans completed, some of which will be built this year. The following are under way: For Mr. F. E. Warren, house furnishing goods "Emporium"; building is 132 by 180 feet, two and three stories (floor area, 49,920 square feet), brick walls, tin roof, plate glass, vaults and elevators; the steam-heating and plumbing are very complete, cost $50,000; Messrs. Hallock and Howard, of Denver, are the builders. For F. E. Warren, just finishing "Warren's Block," on same site as the old one which was burned March 4, 1884; four stores, three-story and basement; upper stories divided into eighty rooms for offices. The building is 89 by 120 feet, built of brick, tin roof, heating by steam, plumbing, etc., first class, cost $24,000. Under way for C. P. Justus, A. Underwood, and the Cheycnne Lodge No. 2 of the Knights of Pythias: K. of P. block, 70 by 100 feet, two stories and basement, pressed and moulded brick fronts trimmed with stone, iron store fronts, plate glass, three stores, lodge-room above, 26 by 52 by 18 feet, tin roof, plumbing, elevator, etc.; cost, complete, $25,000; M. P. Keefe, builder. For Mr. W. A. Robbins, a twelve-room frame cottage, 39 by 59 feet, with all modern improvements, cost $5,000; M. P. Keefe, builder. For Mr. J. E. Ruggs, eight-room frame cottage, 35 by 49 feet, cost $3,500; Geo. McSwain, builder. For Mr. F. E. Goodrich, six-room frame cottage, 36 by 40 feet, cost $2,400; Geo. McSwain, builder.

Chicago, Ill.—The fall outlook is in every way encouraging, the planning of residences being especially active, and, though flat building is thought by some to have been overdone, the good work still goes on, and past experience is making those now built more habitable and convenient than some of those built last year, among which might be mentioned some on a prominent West Side street, in which the main entrance and outer hall is several inches less than three feet in width. Bedrooms are being made more like sleeping apartments than like closets, and the tenants are less apt to use those in flats recently built for closets, and do not, as formerly, sleep in the parlors. There is a comparative lull in the projection of business structures, but some sections are being rapidly improved.

The large office-buildings commenced several months ago are being rapidly pushed forward. The foundations for the Marshall Field building, S. S. Beman, architect, are completed. The Home Insurance building, W. L. B. Jenney, architect, for which most of the contracts have been let, is up to the third story, and the massive granite walls are about ready for the brickwork that continues from this point. The Northwestern Safety Deposit Company's building, Burnham & Root, architects, is up to the third story, and shows the Trenton brick and exceedingly ornamental terra-cotta work of the walls to good advantage, promising the richest effects of all the new buildings in progress. The Mallers building, J. J. Flanders, architect, is also up to the third story, and will excite much curiosity and comment because of its peculiar style. The basement and first story, of granite, give promise of a symmetrical and well-built structure. The foundations of the Daft building, S. V. Shipman, architect, are in, and work will be rapidly pushed. The ironwork of the Board of Trade tower is all in place, and this building is an agreeable surprise to those who see it for the first time, its height and massiveness being its especial feature. Excavation for the building for Louis Hansen, Burnham & Root, architects, has been commenced, and the iron columns of the first story of the Opera House building, Cobb & Frost, architects, are being placed, while the Sibley warehouse and the Continental building, Geo. H. Edbrooke, architect, the Memory building, J. M. Van Osdel & Co., architects, are ready for roofing. This indicates the amount of large buildings, all nine stories and over in height, in progress in the heart of the city at the present time.

The laying of underground telegraph wires by the City Fire Department, commenced some three months ago, and their practical and perfect working, shows that the objections raised by telegraph companies against this system are without support.

Accidents have become too frequent, especially in the Board of Trade building, and while, as usual, the men who are killed are alone to blame, there should be some system adopted by which scaffolding should be made absolutely secure before men are allowed on it, and none but careful and competent men be allowed to erect scaffolds.

It is understood that Dearborn street will be immediately opened from Jackson street to Polk street, and as the Union League Club will erect a building on this corner, and there are several other large structures projected in this neighborhood, the increase in value of property on the line of this street is assured.

Though no sketches have been formally presented for acceptance to the Union League Club, there have been several designs drawn by the architect, W. L. B. Jenney. One, which is especially fine and rarely true to type, and would, because of this and because the style is totally different from any other yet built in Chicago, is one that is singularly adapted to the use of brick and terra-cotta of a form much in vogue in northern Italy, particularly in Lombardy, and it is hoped that the taste of the members will recommend the acceptance of this design. Though the interior plans have been practically finished, the ladies—who seem to have a voice in the matter—suggest many changes, and this, if considered, may interfere largely with making the building comfortable alike to the gentlemen members unless better counsel prevails and the plans that suit the convenience of gentlemen are acceptable to the ladies as well. For instance: it seems out of place to destroy a beautiful entrance on Jackson street because the ladies wish a special entrance and suite of apartments to themselves on Fourth avenue. This, architecturally considered, is almost an impossibility, considering the size of the lot and the requirements of a properly planned clubhouse.

Architects Adler & Sullivan have completed the improvements in Haverly's Theatre, and given to it the best entrance possessed by any Chicago theatre. The arrangement is a vast improvement, and the decorations, while gorgeous, and in some instances flashy, lend a brilliancy of effect that is not oppressive, which is too often a feature of theatre entrances. The art galleries, which form the sides of the main entrance, are hung with some superb paintings and statuary that are worth seeing. Considering this—the remodeling of a very defective entrance—the architects have been eminently successful. They have also drawn plans for, and are making extensive improvements in, McVicker's Theatre, which will include a thorough reorganization of the interior, remodeling the entrance and entire front and adding two stories to the building, which will also include placing two passenger elevators. This improvement was contemplated a year and a half ago, and full plans were at that time drawn, but the work has been deferred until now.

Architect S. M. Randolph is letting contracts on a fine dwelling for J. W. Midgley, Esq., to be erected at No. 645 West Adams street; it will have pressed brick front and side with trimmings of Connecticut brown stone, two full stories with mansard attic-story and a cellar for furnace and fuel rooms, laundry, etc.; the finish mostly of cherry; cost about $12,000. Is making plans for two dwellings for Edward Iverson, Esq., to be erected on Wabash avenue, near Thirty-fifth street, two full stories and basement, brick fronts with brown stone and terra-cotta trimmings; cost about $10,000. Also for Thos. Parker, Jr., Esq., at No. 522 West Monroe street, an apartment house of unique design, with handsome front of pressed brick with brown stone and terra-cotta trimmings; cost about $10,000. Also for H. H. Kohlsaat, Esq., a fine dwelling at north-west corner of Prairie avenue and Thirtieth street; the design is not yet ready for description; cost about $20,000. Has in course of construction, and nearly finished, for L. Eliel, Esq., a handsome dwelling at No. 3440 Indiana avenue; the front is of Anderson pressed brick with brown stone trimmings; cost $8,500. Has in course of construction, and nearly finished, for H. C. Durand, Esq., the fine six-story wholesale store, 42 by 100 feet, at north-west corner Franklin & Quincy streets; the building will be finished about October 15, and will cost nearly $60,000. Has in course of construction two dwellings for Mrs. Agnes Kripler, on Groveland Park avenue, near Twenty-ninth street; will cost $6,000. Has in course of construction a block of six tenements for Joseph Shaw, Esq., at Nos. 396, 398 and 400 West Congress street, Lemont stone fronts, two stories high; the cost will be about $12,000. Has in course of construction improvements in residence of Jos. Downey, Esq., at No. 232 Honore street; will cost about $2,000. Has in course of construction for E. A. Fox, Esq., at Oak Park, a cottage costing about $6,000; and for M. D. Buchanan, Esq., at Oconomowoc, Wis., a lakeside residence costing about $12,000. Has just completed for Mrs. A. S. Hale, at No. 3308 Indiana avenue, a dwelling with pressed brick front and side, stone trimmings, etc.; cost $8,000. Has designed for Messrs. Holmes, Pyott & Co., on West Van Buren street, near Laflin street, two stores with apartments above; the building will be 50 by 80 feet, three stories high, St. Louis pressed brick, with brown stone and terra-cotta trimmings, and will cost about $15,000; will not probably be built until next season.

Architects Bauer & Hill are preparing plans for three dwelling houses, 55 by 70 feet, on the corner of Thirtieth street and Groveland Park avenue, for Conrad Seipp, to be built of Anderson pressed brick with Connecticut brownstone trimming and terra-cotta ornamentation, with red granite steps, interior to be finished in first-class style throughout, cost $21,000; contracts not let. Also preparing plans for Wm. C. Seipp, for a two-story, attic and cellar residence, 63 by 62 feet, Anderson pressed brick with brownstone and terra-cotta trimmings, located on Groveland Park avenue near Thirtieth street, cost about $22,000. Have let contracts for a three-story building, 24 by 70, of brick, for Chas. Schober & Co., lithographers, being built on North Wells street, cost $8,000. Are also preparing plans for an elegant residence to be built on Michigan avenue. Also making an extension to Maj. A. F. Stevenson's residence on La Salle avenue, consisting of a dining-room built of brick. Have also planned for Mr. Stoelker two $21,000 flat buildings on La Salle avenue, north of Division street; they are to be marble fronts and three stories and attic high; James McGraw, mason contractor; Kech & Schultz, carpenters.

Architect H. R. Wilson reports: For Geo. Lister, on Indiana street, near Armour, three two-story bricks, 25 by 45 feet, cost $7,500; under way. For P. O'Donnel, three-story and basement brick, 24 by 50 feet, Van Buren and Leavitt streets, cost $7,000; projected. For J. K. Bigelow, on Page near Lake street, two-story and cellar flats, 32 by 50 feet, cost $4,000; projected. For himself, two-story dwelling, 22 by 60 feet, at 90 Vernon Park place, cost $4,000; under way. For H. S. Newton, at 95 Warren avenue, two-story and cellar dwelling, 25 by 60 feet, cost $6,000; under way. For Mr. Oliver, Monroe street, near California avenue, two-story and cellar dwelling, 24 by 45 feet, cost $4,000; under way. For Mrs. E. Akerstrom, on Madison street, near Garfield Park, two-story and cellar dwelling, 24 by 60 feet, cost $5,000; under way. For Henry Lovi, on Lake street, near Lincoln street, two two-story and basement store buildings, 50 by 60 feet, cost $8,000; under way. For W. H. Gallagher, at 23 Walnut street, two-story dwelling, 26 by 60 feet, cost $4,500; under way.

Architect J. M. Van Osdel has just started a flat for Samuel Wayman, on Adams street, near Aberdeen, three stories and basement, built of Anderson pressed brick and brownstone trimmings, 25 by 82 feet, cost $7,000. Also building a house for John Sollitt, at 519 Jackson street, Anderson pressed brick, trimmed with stone and terra-cotta, cost $12,000.

Architects Burling & Whitehouse have just started two houses, 25 by 76 feet, for F. Nickerson & Son, on Wabash avenue and Thirty-fourth street, three stories and basement and mansard, front finished with copper shingles, cost $15,000 each. Have prepared plans for a house for E. Getchell, on Ontario street, three stories, basement and mansard, with gables, 35 by 65 feet, the first story of mottled Lake Superior stone; above to be of pressed brick, interior finished in hard wood, cost $18,000.

Architect B. F. Townsend is preparing plans for a brick warehouse, 32 by 100 feet, for Barrett & Barrett, four stories and basement, cost $15,000. Also one for Riverdale Distilling Co., brick, three stories and basement, 18 by 85 feet, cost $10,000.

Architect C. C. Miller has under way a livery stable for Amos Churchill, at 184 and 186 North Green street, brick, three stories, 40 by 80 feet, cost $14,000. O'Neill Bros., builders.

Architect J. J. Flanders is building a frame cottage for Mrs. Irish, at Hinsdale, two stories, basement and attic, 30 by 50 feet, cost $6,000. Also has under way a residence for H. C. Morey, at 546 West Jackson street, brick, two stories and basement and attic, 25 by 60 feet, cost $8,000. Also under way, a flat building on Aberdeen street, near Madison, for the Heney estate, brick, three stories and basement, 24 by 75 feet, cutstone front, cost $7,500. Has also planned, for Board of Education, a schoolhouse of the regulation pattern, to cost $40,000.

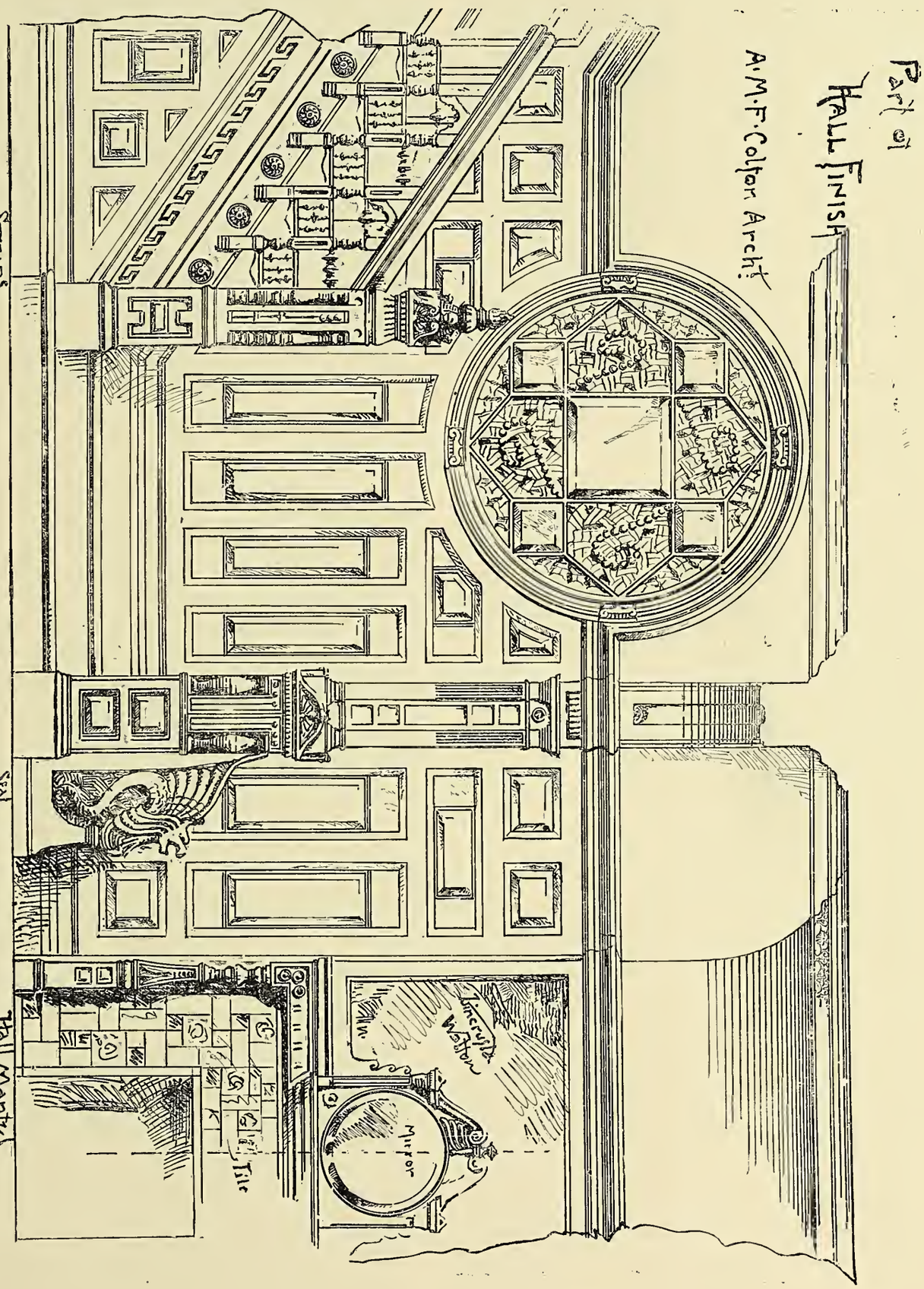
Architect J. C. Cochrane has a house at Crown Point, Indiana, for Mrs. A. N. Hart; frame, with brick cellar, two stories and attic, cost $6,000. Also a Presbyterian church at the same place, brick-veneered, 40 by 60 feet, containing belfry and high roof; seating capacity for about two hundred and fifty people; cost about $4,000. The Riverside schoolhouse is finished and presents a very handsome appearance.

Architect C. L. Stiles is making plans for a three-story store building, 22 by 60 feet, on West Jackson, east of Halstead; also for a big pressed brick block of 216 feet frontage on Ogden avenue, with three stories and cellar and nine stores; one of the most important of the many improvements on this avenue. Also plans for a $6,000 Queen Anne frame house at Morris, Ill., for John S. Green. The Price & Kauffman building, Green street, near Lake, is now under roof.

Architect W. L. Carroll: For W. E. Olsen, at 425 Idaho street, brick cottage, two stories and cellar, 23 by 42 feet, cost $1,700; Wilkie & Holman, builders.

Architects Schaub & Berlin have planned a residence, 24 by 58 feet, for Mr. Kreite, of the North Chicago rolling mills, to be erected on Lincoln avenue, near Centre street. The front will be of brown and green stone; cost $7,000.

Architect W. L. B. Jenney has just let contracts for a residence and barn for Mrs. E. J. Ward, at No. 147 Kimbark avenue, cost $12,000. Residence for J. W. Moore, brick, stone and terra-cotta trimmings, with slate roof, on Vincennes avenue, south of Thirty-ninth street; and residence for S. L. Moore adjoining, and a duplicate of the above; cost, each $8,000. Two houses each for Wm. Maber and Keever Bros.; brick, with stone trimmings, mansard roof, three stories and basement. The four houses occupy 80 feet



DETAILS OF RESIDENCE FOR CHAS. K. MILLER.—A. M. F. COLTON, Architect.

front on Oakwood boulevard, near Drexel, cost $7,000 each. Residence for Mrs. Annie C. Allen, at 18 Walton place, has just been completed. House for W. H. Mohouse, on Grand boulevard, south of Thirty-seventh street; basement work nearly completed.

Architect Greg Vigeant reports: For Mrs. Eugenia Clouthier, on Leavitt street and Blue Island avenue, pressed brick flats and stores, two stories and cellar, 50 by 72 feet, cost $6,000; Geo. Lehmann, builder.

Architects Adler & Sullivan report: For Mr. Martin Ryeson, a six-story store building, the foundation of which will rest for the winter, and in the early spring work will be resumed. The Troescher building on Market street is well under way and will be pushed to a speedy completion. Also just let contracts for Mr. Rubel's house on Ashland avenue; brick and stone, with terra-cotta trimmings, two stories and basement, 36 by 70 feet, mansard roof, cost $8,000.

Architect Wm. Strippleman reports: Remodeling the National Life building for Messrs. Hickson and Fuber, cost $40,000. Also under way, three-story and basement brick flats, for John Goodwin, on the north-east corner of Madison and Western avenue, 48 by 65 feet, cost $14,000. For Chas. E. Martin, a three-story and cellar brick building on Market street, south of Madison, 75 by 94 feet, cost $5,000 For W. Koch, a hotel near the poor house, pressed brick, three stories and attic, 36 by 70 feet, cost $9,000; H. Sennig, builder. For H. Beck, on the south-east corner of Thirty-first and Mill streets, a two-story and cellar store and flat building, 48 by 56 feet, cost $8,000. For Capt. J. C. Perrett, on the south-east corner of Adams street and Hamilton avenue, a two-story and cellar brick, flats, 24 by 64 feet, cost $6,000. For H. R. Scheeler, on Third avenue, south of Taylor, two-story and basement flats, 24 by 60 feet. For W. Matther, on Gurley street, west of Blue Island avenue, three-story and basement store and flats, 25 by 60 feet, cost $8,000; E. Geyer, builder. For Jas. Campbell, at 403 Blue Island avenue, a three-story and basement store and flats, 24 by 65 feet, cost $7,500. For Lorenzo Pilkington, on Kimble park, between Oakley and Leavitt streets, a two-story and cellar brick dwelling, 22 by 54 feet, cost $4,000. Also prepared plans for a two-story and cellar flat building on Paulina street, north of Indiana, for Edman J. Burke, 46 by 65 feet, cost $8,000. For a two-story, attic and cellar, pressed brick and terra-cotta trimmed residence for August J. Mohus, on Oakwood boulevard, east of Grand, 26 by 58 feet, cost $8,000. For a five-story and basement warehouse, on Kinzie street, east of State street, for August Gebhardt, 50 by 100 feet, cost $18,000.

Architect C. M. Palmer reports seven houses on Oakwood boulevard for Mrs. Chittendon, white stone fronts, two stories and basements, 20 by 60 feet; cost of the seven, $35,000. For H. R. Payson, four stories and basement flats, 40 by 70 feet, at 2413 State street; also building nine brick cottages for the same gentleman on the corner of Twenty-seventh street and Shield avenue; Alexander Ross, contractor. Also brick house at Kenwood, and two at Hyde Park, two stories and basement, stone trimmings, for C. S. Baker, 26 by 60 feet, cost $14,000. Also two houses for W. M. Campbell, on North Wells street and Florimond street, cost $6,000. Building for Brown Bros. Manufacturing Co., on the corner of Clinton and Jackson streets, four stories and basement, 106 by 83 feet, cost $30,000; Rosseller & Winkler, builders. Also two houses at Galesburg, Ill., for O. T. Johnson & Co., cost $6,000.

Architects Edbrooke & Burnham report preparing plans for a very large and fine residence for J. B. Kirk, at Evanston, Ill., two stories and basement, modern style of architecture, and when finished will be one of the finest residences in the suburbs of the city; cost $45,000. For Mr. Arthur Kirk, at Evanston, a very fine frame residence, two stories, basement and attic, 35 by 65 feet, cost $10,000. Also preparing plans for another large warehouse for J. S. Kirk & Co., adjoining their present buildings. It will be nine stories, 108 by 120 feet, and thoroughly fire-proof, cost $60,000.

Architect S. V. Shipman reports: For Eckart & Swan, four-story and basement warehouse, cost $8,500; in process of erection. Four cottages for T. D. Lowther, Esq., West Adams, near California avenue; E. Earnshaw, mason; W. Goldie carpenter. Dwelling house for L. E. Merriam, 790 Washington boulevard, Anderson pressed brick and brownstone dressing, cost $6,000: N. Cameron, mason; T. Sollitt & Son, carpenters. Dwelling house for Martin O'Connor, 135 Ontario street, three-story and cellar, cost $7,000; Winckler, mason; F. H. Avers & Co., carpenters. Block of four stores and flats, four-story and basement, corner Harrison and Loomis streets, cost $28,000; Geo. Lehman & Co., builders.

Architects Thomas & Rodgers report just closing contracts for stores and flats on the corner of Halsted and Depuyster streets, for Jacob Franks, brick, three stories, basement and attic, 30 by 97 feet, cost $16,000; S. J. Moss, mason. Also, three-story, basement and attic, stores and flats on State street, corner Thirty-fourth, for White & Co., 75 by 85 feet, cost $26,000; Jas. Connell, mason. Also stores and flats on Cottage Grove avenue, near Thirty-seventh street, for G. W. Hoffman, 156 by 63 feet, three stories, pressed brick, with terra-cotta trimmings, cost $30,000. Also, plans for same gentleman for three-story flats on North State street, near Indiana, 30 by 70 feet, cost $15,000: contract not let.

Architect Alfred Smith reports two houses for Herman Vollmer, on the corner of Adams and Robey streets, pressed brick, brownstone trimmings, two stories, cellar and mansard roof, each 16 by 58 feet, cost of each $5,000; contracts not let.

Architects Treat & Foltz report under way a two-story and basement pressed brick residence, 46 by 70 feet, for A. Smitt on Drexel boulevard, near Forty-sixth street, cost $35,000; P. J. McCormick, builder. Have prepared plans for a block of eight stores, two stories and basement, for Leopold Bloom, on the corner of Michigan avenue and Thirty-first street, cost $30,000; no contracts let. Also commenced work on W. J. Watson's residence on Prairie avenue, near Twenty-sixth street, brownstone, three stories and basement, 36 by 70 feet, cost $35,000; A. Bemolt, builder.

Architect J. H. Huber has plans for a residence for J. H. Batterman, on Dearborn avenue, near Division street, pressed brick front, brownstone and terra-cotta trimming, 25 by 60 feet, cost $7,000. Has let contracts for a double three-story flat building, 50 by 50 feet, on Finell street, for Mrs. McCarthy, cost $8,500. Also let contract for one-and-one-half-story brick cottage, 25 by 57 feet, for J. Staab, on Lincoln place, cost $3,000; D. Lane, builder. Also, a barn for H. H. Anderson, at Ravenswood, cost $1,000.

Architect Geo. H. Edbrook reports remodeling a house for J. H. Hulburt at Oak Park, Queen Anne style, cost $15,000. For Dr. Steel, on Indiana avenue, between Twenty-ninth and Thirtieth streets, a Queen Anne residence, two stories and cellar, brown stone trimming, interior nicely finished in oak and mahogany, cost $10,000.

Architect Henry Sierks reports: For Geist Bros., at 1815 State street, three flats and stores, pressed brick front, stone trimming, modern style, four stories and basement, 25 by 140 feet, cost $18,000; Messrs. Steinmetz & Eilenberger, builders. Also for Chas. Menzel, corner North avenue and Milwaukee avenue, three-story and basement building, Anderson pressed brick, 25 by 100 feet, cost $12,500; Peter Ott, builder. For F. W. Weber, on the corner of Milwaukee and Elston avenues, a three-story and basement building, 25 by 70 feet, cost $8,000; Meyer & Jackel, builders.

Architect C. A. Alexander has plans for a Catholic church at Nos. 58, 60 and 62 Illinois street, style Gothic; the front will be of stone; the alter is modeled after a church in Rome; seating capacity for about eight hundred people, cost $20,000; Jno. M. Dunphy & Co. will build the edifice.

Architect Louis Martens has recently completed for himself a three-story stone and brick residence, 25 by 80 feet, at 538 West Van Buren street.

Architect S. S. Beeman reports plans for a house for Geo. C. Eldridge, cost $25,000; also stable, to cost $800. For Dr. Nelson, at Indiana avenue and Twenty-fourth street, brick and stone, three-story and basement, cost $15,000; under way. For W. H. Burnett, two three-story and basement, 13 by 45 feet, brick, with terra-cotta and red slate trimmings. Also six houses for Mr. Burnett, on Oakwood boulevard, 15 by 50 feet, three-story and basement, brick, with terra-cotta trimmings, red slate roof. Also cottages for Mr Jackson, Mr. Minor and Dr. I. C. Cook, to cost $4,200, $6,500 and $4,500, respectively; all to be erected at Rosalie Villas, South Park station. Also cottage for Mr. F. Chandler, at same place, to cost $3,000. For Mr. F. Reyholds, two cottages, cost $4,500 each. Also several new buildings at Pullman, Ill., and a store building for Messrs. Murphy & Co., at St. Louis, Mo., to cost $25,000.

Architect F. L. Charnley reports as just finished, a block of brick buildings on North Franklin street, four stories, 25 by 50 feet, cost $6,300; Patrick Cummings, builder. Also house in Kenwood for C. H. Duthmann, cost $4,000. Remodeling Judge Hall's building on Wabash avenue, cost $3,000. Also building a brick house for John W. McGinnis at 1911 Indiana avenue, three stories and basement, mansard roof, rock-faced stone front, 30 by 55 feet; John Griffiths, mason. Also remodeling E. S. Pike's house on Prairie avenue and Twenty-first street, cost $18,000. Also three houses for Jas. J. Gore, on Wabash avenue, between Twenty-sixth and Twenty-seventh streets, three stories and basement, pressed brick, brown stone trimmings, 50 by 60 feet, cost $15,000. Also remodeling a house on the corner of Drexel boulevard and Fortieth street for S. P. Parmley, cost $5,000. Also changes in the Iriquois club room on Monroe street, cost $5,000. Also changes in John J. McGrath's house at 330 Dearborn avenue, cost $3,000.

Architect H. D. Deam reports under way for Mrs. A. D. Wilcox, at 283 West Adams street, three three-story residences, 21 by 65 feet, front of Zanesville brick, French roof, cost $15,000; S. Webb, mason; J. G. Richardson, carpenter. Has prepared plans for three residences on the west side, to be molded bluestone rock, faced fronts, two stories and cellar, 65 by 16 feet, cost $10,000. Also three brick-front houses for A. Weaver, at 109 and 111 Cedar avenue, 50 by 46 feet, cost $6,000. Also completing a villa at Hamilton, Ia., for A. Kinglan, cost $2,000.

Architect L. B. Dixon has plans for a two-story frame residence, stone basement, for B. D. Slocum, on Greenwood avenue, between Forty-seventh and Forty-eighth streets, cost $7,000. Also four houses for Chas. B. Dupee, on Jefferson avenue, between Fifty-first and Fifty-second streets. Two are pressed brick, stone basement, red shingle roof, two stories; the others have stone basements, with frame superstructure, red shingles and siding, four houses, cost $30,000.

Architect E Baumann is building a residence on Indiana avenue, north of Twentieth street, for C. H. Blair, three-story and basement, 73 by 25 feet, stone front, containing wood and galvanized iron, bay window, cost $12,000. For the same gentleman, on Michigan avenue, near Twenty-fifth street, residence, three stories and basement, 75 by 22 feet, stone front, built about the same as the one above mentioned, estimated cost $12,000.

Architect Geo. Garnsey reports plans for a two-story and basement frame residence, for O. J. Rattle, at Oak Park, 31 by 35 feet, cost $3,000. Also plans for another nice frame residence at Oak Park.

Architect L. G. Hallberg reports a residence for Elias Jacobs on Kemper place, near Orchard street, Indiana pressed brick, two stories and basement, 25 by 53 feet, cost $5,000; under way; O. Tamnler, mason; John Reuth, carpenter. Also a frame residence for E. J. Lubeck, on York place near Divesey avenue, one-story and basement, 23 by 50 feet, cost $2,500.

Architect Wm. Thomas has under way a residence for Julius Emert on Oak street, near the Lake Shore drive, 20 by 68 feet, three stories and basement, with front of broken range, Connecticut brown stone, with carved stone and terra-cotta trimmings, mansard roof and ornamental porch, cost $8,000. Also preparing plans for a residence for Mr. Sullivan of the *Tribune*, on Lincoln place, two stories and cellar, 25 by 56 feet, pressed brick front, with terra-cotta trimming, carved stone caps and ornamental galvanized iron cornices, cost $6,500. Preparing plans for six frame cottages for S. A. Dale, at Lake View, in Gothic style, 20 by 42 feet, ornamental gables and porches, cost $1,600 each. Also has under way for L. Mason, on Claybourn avenue, near Fullerton avenue, two stores and flats above, pressed brick and iron front, with galvanized iron cornice; cost, complete, $9,000.

Architect B. W. S. Clark is preparing plans for a residence for Mr. Colwell at Englewood, two-story frame, stone basement, mansard roof, 28 by 48 feet, cost $4,500; no contracts let. For E. Burnham, at Hyde Park, frame, two stories and basement, mansard roof, 31 by 54 feet, cost $5,000; contracts not let. Also has under way the opera house and store building, at Englewood, for J. B. Lanyon, brick, 60 by 112 feet, four stories and basement, seating capacity for fifteen hundred people, cost $40,000.

Architect Barfield: For E. J. Jenison, on Burling street, two stories and attic, Queen Anne style, 56 by 23 feet, cost $3,000. For John O'Connell, Supervisor of Lake View, a three-story brick and stone residence, with rock-faced trimming, 45 by 47 feet, mansard roof, handsomely finished interior; cost, complete, $12,000. Preparing plans for a Queen Anne cottage, at Oak Park, for Mr Sharp, two stories and attic, 35 by 54 feet, cost $4,000; no contracts let. Also planned a $4,500 house for Henry Hoyt, at Woodlawn—a Queen Anne frame. Also on Center avenue, south of Harrison street, $7,000 brick and stone dwelling, for Mr. Foley. Also has completed on Lake View side of Fullerton avenue, near Lincoln avenue, a two-story residence for Mr. Boyer. Also new plans for a $3,000 Lake View home for Mr. Dunne. Also another Lake View cottage for Mr. Brown, on Wrightwood avenue, near Lincoln. Also three houses for E. A. Hartwell, on Jackson, near Paulina, for $3,000.

Architect J. Otter has prepared plans for a two-story and cellar carriage shop for Messrs. Backenhaus & Mueseler, 50 by 76 feet, to be erected on Indiana street, near Market, cost $4,000; contracts not let. Also preparing plans for a building of flats, three stories and basement, for D. Cahn, on Chicago avenue, near the corner of Sedgwick street, brick, 25 by 70 feet, cost $7,500. A residence for John F. Walsh, North Park avenue, near the Artesian well, brick, three stories and basement, 41 by 92 feet, cost $12,000. Has let contracts for a brick house for J. Casey, three stories and basement, 25 by 64 feet, on Huron street, near the corner of Market street, cost about $6,000; mason, C. Linstrom; carpenters, P. Larson & Co. Also a frame house for C. G. Isaacson, two stories and basement, 22 by 50 feet, on Sherman place, near Clark street, cost $3,000. Contracts let for a dwelling and store for H. Henderson, on the corner of Hubbard and Huron streets, 22 by 40 feet, two stories high, cost $3,000; mason, C. Lind. For J. Thorsell, three-story and cellar brick residence, 24 by 85 feet, on Chicago avenue, near Townsend street, cost $11,000; mason, C. Lindstrom; carpenter contractors, G. A. Johnson & Co. Also an addition and extension on the residence of Mrs. Hawkinson, at 370 Mohawk street, cost $2,500. For John Hart, residence, northeast corner of Townsend and Locust streets, brick, four stories and basement, 24 by 85 feet, cost $10,500; mason contractors, Messrs. Hausehalter & Luchring; carpenters, Ramcke & Repsold.

Architect J. W. Ackermann has let the contract for a residence for D. W. Eldred, to be erected at No. 812 West Adams street, 26 by 52 feet, two stories and cellar, cost $6,000; Peter McNally, contractor. Also, for S. J. Sherwood, residence, Thirty-seventh street and Langley avenue, 22 by 52 feet, two stories and cellar, cost $5,000.

Architect O. H. Matz is designing for John M. Faulhaber a three-story and attic brick building, to be erected on North Clark street, near Goethe. It will be faced with Philadelphia brick, red sandstone and terra-cotta. The structure—28 by 95 feet—will rest on tile-vaulted cellars ten feet high, inclosed with heavy stone walls and lined with hollow sewer brick walls, cost $12,000. Also making plans for a double three-story brick building, 44 by 65 feet, stores and flats, to be built on Orchard street for Ulrich Busch, at a cost of $11,000.

Architect Harry Firth reports the Metropolitan Gas Works, at Hyde Park, suspended on account of the Hyde Park Commissioners running a boulevard through the park. It is intended, however, that the building will go on either in the same place or near vicinity.

Architect Robt. Rae reports the building of the Farragut Boat Club House, on Thirty-second street, near the lake, brick, with stone trimmings and terra-cotta ornamentation, two stories and basement, 40 by 80 feet, and will be finished in first-class style, cost $20,000.

Architect Frederick Ahlschlager has planned at South Chicago, corner of Ninety-second and Ontario streets, for C. F. Ness, a brick store building and apartment house, to cost $6,500. Also a new German Lutheran church, corner of Forty-eighth and Frazer streets, cost $7,500; will hold 700, and be a pleasing-appearing frame, with a central tower over 100 feet high; F M. Chelius, contractor.

Architect J. Zittel is preparing plans for a two-story and basement brick residence for Mr. Heinberg, on Rees street, cost $6,000. Also a brick store, with basement flat and attic, for Mr. Herman, at 92 Webster avenue, cost $6,000.

Architect J. C. Doerr has planned a block of residences, to cost $30,000, at the corner of Twenty-sixth street and Fifth avenue. Also a $35,000 block of stores and flats, corner Butterfield street and Archer avenue. Both blocks will have fronts of Anderson pressed brick.

Cincinnati, O.—Outlook very favorable; a large amount of work being done for this season of the year. Architects and contractors are generally busy.

On Thursday evening, July 31, the new Grand Central Passenger Station (Mr. Willis P. Thorp, architect) was formally opened to the public. The structure is undoubtedly one of the most substantial, extensive and beautiful railway buildings in the country. The main building is 108 by 85 feet, five stories high, including basement. The wing is 33 by 259 feet, four stories high. The omnibus sheds are 84 by 66 feet. The second story of main building and wing is built of heavy white Indiana limestone, laid in rock-faced range work, trimmed with dressed Indiana lime and Bedford stone. Third story is of Blue River limestone in broken ashlar style. Remaining stories are of brick, faced with red pressed brick, terra-cotta and yellow pressed brick, and Bedford stone trimmings. The whole is surmounted by an ornamental slate mansard roof 27 feet high. The interior is very elaborately finished; the woodwork is of polished cherry and the ceilings are very handsomly frescoed. A great deal of rich ornamental glass is used, and the interior is in all regards in keeping with the beautiful exterior. The cost of building complete, including ground, is $1,130,000.

Architect Lucian F. Plympton reports outlook fair. For Mr. R. G. Evans, in Covington, Ky., a two-story brick residence, 30 by 40 feet, cost $4,300; under way; Mr. Barton, builder. For Mr. D. C. Hemingray, in Covington, Ky., a two-story residence, 27 by 35 feet, first story brick, second story half timber, cost $4,000; projected.

Architect S. Hannaford reports that he has designed spire for finish of St. Xavier's church, and is now taking bids. Also made drawings for brick house for I. Strauss on Walnut Hills, cost $20,000. Store building for M. M. White, on Court street; pressed brick front, four stories high, cost $25,000. Residence for T. L. Campbell, New Castle, Ind.; brick, cost $5,000. Residence for David Banning, Walnut Hills; brick, tile and half timbered work, cost $15,000. Priest's house at Hamilton, Ohio, for Rev. J. H. M. Bonner, brick, cost $5,000. Mr. Hannaford is now making sketches for several suburban houses; plans not yet perfected; bids in and contracts let for new Derby publishing building, Fourth and Elm streets.

Architect Theodore Richter, Jr., has completed plans for a two-story dwelling, mansard roof, for John Dewald, Brown street; remodeling of brick and stone building for Rosenburg Bros., Fifth street, near Park; remodeling of brick residence for John Keeshan, Grand avenue, Price's Hill; two-and-a-half-story frame dwelling for Mrs. Ida Schroder, at St. Bernard; new block of four limestone dwellings, to be called "Edinburg Row," for the Huntingtons on Mason street, Mt. Auburn; small double dwelling for Alex. Axer, Wood street, Covington, Ky.; two-and-a-half-story dwelling for Mrs. C. M. Richard, Clifton Heights; two-and-a-half-story frame dwelling for J. R. Monfort, Kinney avenue, East Walnut Hills: frame dwelling for W. E. Wiehgar, East Norwood; a store and flat for S. Taft, to be erected on Central avenue.

Architects G. & A. Brink report the following: A three-story tenement house for H. Klinkhammer, to be erected on Providence street, near Fifteenth; brick store and residence for John Schroth, Fourth avenue and James street, Camp Washington; four-story brick for Fred Hasbrnck, McLean avenue, near Harrison avenue; residence for H. Hewey, foot of Price's Hill, Warsaw Pike; brick dwelling on Osage avenue, Price's Hill; remodeling and an addition to Catholic schoolhouse on Budd street; four-story brick dwelling for Frank Voss, at Dandridge and Frank streets; four-story brick tenement for Frank Neiman on Woodward avenue: three-story brick for John Schulte, at 125 Betts street; two-story brick residence for A. Klefken, Banklick street, Covington, Ky.; four-story brick dwelling for Mrs. Macke, on Liberty street, near Logan; three-story brick for Chas. Weis, on Bank street; four-story brick for Mr. Michaels, Thirteenth street, near Main; three-story brick for H. Fieldhouse, at Neave and Stabler streets, Twenty-first ward; chapel for German Protestant cemetery, Carthage road, to cost $15,000; a stone residence for Charles Silverson, Freeman avenue, near York street; pressed brick front, three-story brick, for A. Drees, Freeman avenue and Dayton street; three-story brick dwelling for Joseph Nurre, and three-story brick dwelling for A. Engbers, adjoining houses, on Dandridge street; three three-story brick dwellings for H. Strubbe, Corryville; three-story brick for A. Bode, Martin street; three-story brick dwelling for Frank Kramer, on Dayton street, near Coleman, a fine modern residence; two double store fronts for Frank Grever, Ninth street, near Mound; four-story brick for Mrs. Soergel, Ludlow and Pearl streets; two-and-a-half-story brick residence at Richmond, Ind., for H. Klinkhammer; double three-story brick for Frank Baxtermann, Ninth, near Freeman avenue; residence for Mr. Grothaus, Madison street, near Eighteenth street, Covington, Ky. A number of these buildings are already under way.

Architect W. W. Franklin has completed plans for a double brick dwelling for W. H. Parr, on Barr street, cost $6,000. For Mr. Joseph Eversole, at Avondale, a two-and-one-half-story frame residence. For Mr. Harry Ferguson, at Elmwood, a one-story frame dwelling.

Architect Edwin Buddemeyer has completed plans for a row of four brick houses on Coleman street for L. Grace; a double brick house for Jas. Lowes, on Everett street; stores and flats for S. Kuhn, to be built on West Fifth street; a five-story business house for D. Foerster, on West Second street; semi-detached houses for L. Voight, Walnut Hills; brick residence for Wm. Miller, Highland avenue; school-house and frame cottage for Dr. Hellman, Bond Hill; school-house at Dayton Highlands, Ky.; residence for R. Kirk, Lebanon, Ky.; also bank building at same place; a row of three houses for Thos. Stokes, on Brown street; additions to brick house on George street for Mr. Cain.

Architect Charles Crapsey has plans for the complete remodeling of Wm. D. Foulk's residence, Richmond, Ind., cost $9,000. Brick dwelling for Charles E. McFarlan, Ninth street, near Baymiller, cost $5,000. Frame dwelling for R. S. Waddell, Columbia, cost $4,000. Small frame dwelling for Joseph F. James, Avondale, cost $3,000. Two frame dwellings for Wyoming Improvement Co., cost $6,000. Four-story brick carriage warehouse, 60 by 120 feet, to be erected at Kansas City, Mo., for George Enger, of Cincinnati, cost $18,000. Frame dwelling for H. R. Riffe, Ludlow, Ky., cost $3,000. Frame dwelling for H. H. Smith, Avondale, cost $5,000.

Architect S. E. DesJardines recently completed plans for frame dwelling for Miss Williams, Walnut Hills, cost $7,000. Frame dwelling for John A. Cochran, Fairmount, cost $6,000. Brick and frame dwelling for William Harvey, Walnut Hills, cost $7,000; lower story brick; upper story frame. Remodeling Daniel Delaney's residence, Walnut Hills. A church and residence at Richmond, Ky. Also, under construction, a dwelling of J. Shelby Irvine, of the same place. Also furnished plans for rebuilding residence of D. D. Bell at Lexington, Ky.; Wm. H. Stewart's Sons, contractors.

Architect James McLaughlin has completed plans and drawings for a fine brick residence for Mrs. Michael Eckert, to be built on Reading road, above Oak street; two-and-a half stories in height, of modern construction and beautiful finish throughout. Also for a first-class brick residence for Benj. Cox, Oak street, west of Reading road. Entire new plans for Hamilton County Courthouse. At first it was believed that most of the old walls could be utilized, but a severe test by a fire engine demonstrated that they were too badly injured, so they must come down, thus necessitating, practically, entire reconstruction and the erection of an almost complete new building. The front in particular will be newly built of new materials throughout.

Architect Geo. W. Rapp has recently completed plans and drawings for the following: For C. Moerlein, plans for a six-story pressed brick store building, northwest corner of Pearl and Race streets, open iron front on Race street; iron columns and lintels between windows; terra-cotta and freestone trimmings; main entrance to stair-case, hall, elevator, etc., on Pearl street; cost $35,000. For Julius Balke, three-story store and opera house building, Berry and Fairfield avenues, Dayton, Ky., to contain four stores on first floor, with offices in rear; large hall, stage, dressing-room, etc., on second floor; two small halls—one for city council and the other for lodge purposes—on third floor; iron fronts to stores; front to be trimmed in terra-cotta and freestone; main entrance and main stairway on Berry avenue, the latter twelve feet wide; slate roof; cost $30,000. For Edwin Stevens, plans for remodeling residence at Crown and Home streets, Walnut Hills; cost $9,000. For E. A. Ferguson, plans for remodeling 205 Dayton street. For C. Moerlein, sketch for winter garden, Vine, near Thirteenth street. For F. Hartkemeyer, plans for two-and-a-half-story limestone dwelling on Myrtle avenue, Walnut Hills; octagon tower, bay window, gables, etc.; parlor, sitting and dining-rooms to be finished in hardwood; cost, $16,000. For Order of Cincinnatus, plans for frame building at Court street and McLean avenue for the storage of floats, decorations, etc., and for the holding of mass meetings; cost $6,000.

Mr. Emil G. Rueckert, who has for the past seven or eight years been connected with Architect Geo. W. Rapp, has recently opened an office for himself, and has the following work on hand: For Mr. John Ellenhorst, at Bellevue, Ky., two brick cottages. For Mr. G. R. Harmes, at Newport, Ky., a double brick dwelling; also making drawings for eight houses for Mr. Harmes, to be erected in Bellevue, Ky. Has just finished plans for a frame dwelling for Fred Harman, at Mt. Auburn. (Mr. Rueckert is a young man, and has many kind friends, with whom we join in wishing him the success his talent is deserving of.)

Council Grove, Kas.—Outlook not very encouraging; building and business have given way to politics. Architect J. H. Leedy reports as follows: For Mr. G. A. Irvin, two-story frame dwelling, 48 by 16 feet, with wing 16 by 16 feet; cost $1,200; projected. For M. E. church, a parsonage, two-story, frame, stone foundation, 16 by 28 feet, wing 16 by 16 feet, cost $1,200; projected. For E. W. Moore & Co., a four-story steam flourmill, stone and wood construction, 38 by 45 feet, to cost $15,000; projected. For Mr. E. W. Cunningham, one-story frame cottage, 24 by 18 feet, cost $500; projected. For A. J. Marks & Co., one-story frame skating rink, 40 by 105 feet, cost $3,000; under way. For First Presbyterian Society, brick church building, 40 by 43 feet, cost $4,500; under way. Mr. Leedy has also completed this season a five-story wood and stone elevator, 40 by 110 feet; wing 40 feet; cost $8,000. Also livery stable for Mr. James Watkins, two-story, frame, 40 by 60 feet. For Mr. S. M. Corry, a three-story frame hotel, 55 by 33 feet, with wing 21 by 70 feet; mansard roof; cost $3,000. Also one-story cottage, 16 by 28 feet, for M. J. Keser.

Creighton, Neb.—The season has been quite a busy one, and the outlook is very promising.

Architect N. L. Raymond reports for Mr. A. D. Holbrook: Two-story frame residence, 24 by 34 feet, cost $3,000; under way. For R. M. Payton, one-and-a-half-story frame dwelling, 24 by 28 feet, cost $2,000; under way. For Rothwell Bros., frame hall building, 40 by 100 feet, cost $2,500; under way; George Thomas, builder. Also several smaller houses, ranging from $500 to $1,500.

Cumminsville, O.—Architect W. E. Strong has made plans for a three-story brick dwelling for Mr. Knowlton; also a two-story dwelling for Adam Wagner, at Maplewood. Mr. Strong also made the drawings for the Odd Fellows' Hall at Cumminsville, which is now near completion.

Clay Center, Kas.—Building business has been fair, and outlook is favorable. Two very fine residences have been erected here this season, from plans by architects abroad. The First M. E. Church society are erecting a fine church building from plans by Architect Benj. F. Price, of Philadelphia, the work being superintended by Architect Robert W. Jones. Mr. Jones also reports the following work from his office: For city of Clay Center, two-story brick school building 35 by 71 feet, cost $10,000; under way. For Clay county Fair Association, one-story frame floral hall and grand stand in form of Greek cross, grand stand 108 feet long, each wing 28 feet square, cost of whole improvement $2,500; under way. For Mr. David Lamoureaux, three-story brick business block, 25 by 70 feet; under way. For School District No. 10, Clay county, one-story stone school house, 28 by 45 feet, cost $1,600; under way. For First Baptist Church Society one-story addition to church building, 21 by 28 feet, cost $600; under way. For Society of United Brethren in Christ, one-story church building, 30 by 50 feet, cost $1,500; just completed. For Mr. David Weir, two-story frame dwelling, 30 by 30 feet, cost $2,250, under way; W. F. Quinn, builder. For Union Church Society at Ames Station, Kas., frame church building, 30 by 50 feet, arched ceiling, shingled roof and spire, cost $2,000; under way. For Clay Lodge No. 115, I. O. O. F., two-story and mansard, lodge building, stone and brick construction, metallic shingle roof, 29 by 100 feet, cost $6,000; projected. For Mr. J. U. Dieter, one-story frame dwelling, cost $800, under way; O. L. Slade, builder. For Mr. W. S. Cannon, at Clyde, Kas., two-story brick business block, 38 by 80 feet, stone basement, tin roof, metallic cornice, cost not mentioned; under way. For Mr. Wm. Breyman, two-story stone warehouse, 45 by 150 feet, cost $1,000; projected.

Des Moines, Ia.—Dr. Fuller is building a fine house on Seventh street. A large addition is being built to the broom factory on East Court avenue.

Architect Wm. Foster is rapidly completing plans and specifications for the new hospital for the insane to be erected at Clarinda. He has been east recently examining institutions of the kind, in order to have the new asylum fully up to the most modern improvements, and has decided upon a plan that will combine the excellencies of both the cottage and pavilion system. The general style will be modern Gothic. The structure will be plain and substantial. It is the intention of the board to use none but the best of material and to bring the most improved of modern systems under tribute to its construction. The systems of ventilation and sewerage and heating will be of the best attainable, and special attention will be given to making the apartments as cheerful and pleasant as possible. The work will be pushed rapidly, and the commissioners propose to give the State an institution of which she may well be proud.

Detroit, Mich.—Building enterprises are not so numerous as during the first part of August, and there is a disposition on the part of some architects to complain. Yet there are many who are well satisfied with the business they have on hand. There is no particular indications of a heavy fall business. Building materials are unusually cheap this year. Ordinary labor is abundant and low-priced, brick can be purchased at very reasonable figures, and many other essential elements of building are cheaper than for several years past. Nevertheless there is no unusual activity in any line of improvements. The contractors have begun work on several buildings of consequence. Among them are the factory of the Detroit Carriage and Wood Work Company, to be built on Hastings street, which will cost $15,000.

Architect A. C. Varney has prepared plans for a residence for Mr. Chas. Rose, at the corner of Park and Columbia streets; brick, with stone trimmings, Gothic roof, cost $8,000.

Architects Wm. Scott & Co. report outlook not very encouraging. Very few buildings projected. The following are under way: For Oakland county, Mich., county jail building and sheriff's residence, 42 by 73 feet, cost about $14,000; Dawson and Anderson, builders. For St. Clair county, Mich., jail building and sheriff's residence, 42 by 75 feet, cost $14,000; Casler & Co., builders. For city of Detroit, addition to House of Correction, cost $6,000; Armstrong & Co., builders. For Riverside Truck Company, storage warehouse building, 50 by 80 feet, cost $15,000; contracts being let. For Captain Anderson, two double dwellings, each 50 by 60 feet, cost $15,000; contracts being let.

Architect Henry Englebert reports: For John Bialk, two-story store and flats, 31 by 65 feet, brick and stone, cost $5,000; under way. For Ida Mertin, two-story brick and stone dwelling, 24 by 38 feet, cost $2,500; under way. For A. Crossard, three two-story brick stores and flats, 64 by 70 feet, cost $8,000; projected. For John Petzholt, two-story brick and stone dwelling, 28 by 46 feet, cost $3,000; contract not let. For John Crops, two-story brick dwelling, 34 by 54 feet, cost $4,200; under way.

The following building permits have been issued recently: Hugh S. Peoples, three-story frame dwelling on Twenty-fourth street, near Indiana street, cost $5,000; John Wagner, brick cooper shop on Mitchell avenue, cost $1,800; Daniel Donovan, frame dwelling, 137 Labrosse street, cost $2,000; T. Albrecht & Co., frame dwelling, 746 Beaubien street, cost $1,400; Julius Forkel, brick dwelling and barn, 693 Beaubien street, cost $2,500; George Colerus, frame dwelling, 141 Grandy avenue, cost $1,100; George Witherspoon, frame dwelling, Warren avenue, cost $2,000; W. Armstrong, frame dwelling, Piquette avenue, cost $2,000; Seth Goodwin, frame dwelling, 23 Piquette avenue, cost $2,000; Alex. M. Gray, brick manufactory on Hastings street, cost $15,000; Julius Hess & Co., brick dwelling, 53 Ledyard street, cost $20,000; O. L. Ballard, four cottages on Mitchell avenue, north of Harper, cost $2,000; A. C. Varney, skating rink on West High street, cost $15,000; A. C. Varney, brass and iron works, corner Warren and Fifteenth streets, cost $12,000; A. C. Varney, double dwelling, 301 and 303 Second street, cost $7,000; A. C. Varney, four brick dwellings, at 486 Brush street, cost $18,000; John Mellen, frame dwelling, 161 Forest avenue, cost $1,500; Joseph Guton, eleven frame dwellings on Garfield and Orleans streets, cost $6,600; John Japes, two-story brick store, 678 Gratiot avenue, cost $3,000; Wm. Hutton, two dwellings, 691 and 693 Croghan street, cost $2,100; C. B. Cole, brick dwelling, 89 Fremont, cost $4,000; C. B. Cole, frame dwelling, 142 Pitcher street, cost $2,500; G. W. Lloyd, alterations in rear of Abstract block, Lafayette avenue, cost $1,500; G. W. Lloyd, addition to 123 Jefferson avenue, cost $2,500.

Eau Claire, Wis.—A sufficient sum has been subscribed to commence the preliminary work of the building of the new Congregational church. The building committee propose to push the edifice to a hasty completion, and the old place of worship will be removed without delay.

Eugene City, Oregon.—Architect G. H. Park reports a very good season and outlook favorable. The place is growing very fast; quite a number of small cottages, ranging in cost from $600 to $800. The following are under way: For Chas. Baker, a three-story brick hotel building, 53 by 65 feet, cost $12,000. For Mr. J. C. Johnson, a two-story frame residence, 30 by 50 feet, to cost $3,000. For J. C. Page, a two-story frame dwelling, 22 by 50 feet, cost $2,200. For Mr. A. Hunt, a two-story frame dwelling, 24 by 44 feet, cost $2,000. For School District No. 6, a one-story frame building, 26 by 36 feet, cost $1,000. For Mr. Geo. Hill, a one-and-one-half-story cottage, cost $1,400. For W. Smith, a one-story frame cottage, 22 by 30 feet, cost $1,100. For Mr. Kinney, a one-story dwelling, 26 by 40 feet, cost $1,600.

Fergus Falls, Minn.—The brickwork on J. N. Allen's and D. M. Cutler's building has been started. The Newman Block has the foundation nearly finished, and with good weather the brickwork on the First National Bank is about to be commenced. Hon. H. G. Page has sold his land and waterpower in this city to the Page flour mills for $30,000. A new mill is going up on the site; also an elevator with capacity for 100,000 bushels.

Goshen, Ind.—Architect J. N. Jones made the prediction that the season would be very dull, and confirms his statement by saying the contractors of this place have not experienced so dull a season in many years; nothing special in view for the fall. The following under way: For F. H. Stare, a two-story and basement brick business block, 20 by 80 feet; Tom Yates, builder. For James Devars, a two-story, basement and mansard brick residence, 29 by 49 feet, cost $3,500; James Devars, builder. For Mr. Mishler, a one-and-one-half-story frame dwelling, 32 by 44 feet, cost $1,700. For Hawkes Furniture Co., addition three stories, frame, 60 by 66 feet, cost not given; Hi. Stutzman, builder. For Mrs. Weyburn, one-and-one-half-story dwelling, 26 by 41 feet; also one 16 by 38 feet; cost of both, $2,500; Amos Schrock, builder. For Dwight Hawks, a two-story frame residence, cost $3,500; D. S. Hopkins, of Grand Rapids, Mich., is the architect; M. Isbell, builder. Contractor Isbell is also building a new front to the *Times* building. Also two-story addition to the Fifth street school building. Mr. Samuel Meyers is about to put a new front into his business block. Some few small houses are being erected.

Hamilton, O.—Architect Max Reutti reports present conditions favorable, outlook seemingly dull. The following under way: For Hamilton City, a two-story brick school-house, 78 by 84 feet, cost about $14,000; Eisel & Mefford, contractors. For J. W. Fye, a three-story store building, 25 by 65 feet, front of freestone, side brick with freestone trimming, cost $8,500. For Asa Spuler, a two-story brick residence, 36 by 56 feet, freestone trimmings and slate roof, cost $4,400; F. Compton, builder. For John Marr, a residence, two-story brick with freestone trimmings, 31 by 59 feet, cost $4,100; J. I. Bender & Bro., builders. For Joe Marr, a two-story brick residence, 23 by 50 feet, cost $2,300. For Mr. Ringwood, a two-story frame dwelling, 21 by 51 feet, cost $2,100. Also two-story double frame dwelling, 33 by 58 feet, cost $3,600. For L. Held, a two-story brick dwelling, 27 by 53 feet, cost $2,400. For Mr. Williamson, a two-story frame dwelling, 25 by 55 feet, cost $1,900. For Mr. Cummins, a two-story frame dwelling, 31 by 48 feet, cost $1,900. For Mr. Pharis, a two-story frame dwelling, 31 by 48 feet, cost $2,300. For Mr. Mark, a two-story frame dwelling, 32 by 34 feet, cost $1,300. Bender Bros. are the builders of all the above, which have been placed in their hands

within the past three months. Messrs. Shuler and Benninghofen propose building a three-story store and business block, 70 by 75 feet, freestone, on First street; also 70 by 45 feet on Second and Third streets: cost is not estimated.

Illinois Corporations.—The following new corporations were recently licensed by the Secretary of State: The South Elgin Stone Company; capital stock, $20,000; incorporators, William Grote, E. D. Waldron, Andrew Magnus, Thomas McBride, Jr., and David McBride. The Chicago Brick, Tile and Terra Cotta Company; capital stock, $200,000; incorporators, John Christiansen, Ed. H. Callaway and F. H. Fenne. The Jennings Drying-Machine Company, of Chicago; capital stock, $5,000,000; incorporators, William H. Murray, George H. Hulbert and Henry D. Warner. The Chicago and Dayton Brick Company; location, Chicago; capital stock, $40,000; incorporators, Henry Hewitt, Ira W. Davis, Charles B. Hess, Hosea B. Williams and James Walsh. The Vosburgh Manufacturing Company, of Chicago, to manufacture gas fixtures, capital stock, $100,000; incorporators, C. A. Vosburgh. B. F. Clark, J. A. Hayes. The Tiffany Pressed Brick Company, of Chicago; capital stock, $150,000; incorporators, James Van Inwagen, Joel Tiffany and Solomon Snow. The Bradley-Wheeler Company, of Chicago; capital stock, $50,000; incorporators, Robert D. McFadden, William A. Gardner and Oliver G. Fessenden.

Ionia, Mich.—Architect O. Waterbury reports business and outlook better than last month. For city of Ionia, two-story and basement high school building, 61 by 61 feet, brick, with sandstone trimmings, slate and tin roof, galvanized iron cornice; projected. For Mr. R. M. Kellogg, frame residence, 32 hy 30 feet, Gothic roof, cost $1,400; contract just let and building under way.

Jamestown, Dak.—Building has been a little slow this season, and outlook is not very bright. Architect J. M. Budge, Jr., reports for Winslow and Bickford, building 75 by 80 feet, three stories and basement, brick and stone walls, terra-cotta trimmings (from the North-Western Terra Cotta Company, of Chicago), galvanized iron cornice. Building will contain one banking and two store-rooms on first floor, second and third stories to be used for offices. The work is being done by the day, under the superintendence of the architect, and is now well under way; cost, complete, $40,000. Mr. Budge was formerly in Cleveland, O., and Oil City, Pa.

Kansas City, Mo.—Building permits have been recently issued as follows: R. J. Gillelen, business building on Union avenue, opposite Union Depot, cost $4,500. John H. Gow, business house at 909 and 911 State Line, cost $5,000. F. J. Hammer, house in Reid's addition, cost $5,000. J. D. Boyer, brick livery stable, at lot 216, hlock 15, McGee's addition, cost $4,500. Thomas S. Ridge, stone front brick business hlock near the corner of Twelfth and Main streets, cost $12,000. E. B. Griff, livery and store room, corner Fifth street and Grand avenue, cost $5,000. Evangelical Association, wood chapel, corner Nineteenth and High streets, cost $2,000. Coale Cracker Co., addition to factory at 206 Main street, cost $7,000,

Knoxville, Tenn.—Wm. Rule, E. W. Crozier and others will shortly build a fifty thousand dollar opera house.

Lansing, Mich.—Outlook not very encouraging. Architect J. Gillett reports: For French Baptist Society, a church building, 64 by 66 feet, 2 by 8 studding, veneered with brick, cost $8,000; enclosed; Henry Gibbs, builder. For Board of Education, two-story brick school-house, 38 by 60 feet, cost $7,000, under way; C. K. Herrick, builder. For Mrs. E. Glicman, two-story residence, 50 by 56 feet, ten rooms, cost $6,000; under way; Wm. Martin, builder.

Lexington, Ky.—Architect J. R. Carrigan reports: It is dull. Have nearly finished for Mr. Woodson Jones two two-story brick dwellings, 31 by 46 feet, cost $2,700 each; Wm. Farley, builder. For Mr. Claude Higgins, one-story frame dwelling, 48 by 58 feet, cost $7,000; projected.

McMinnville, Oregon.—Architect J. C. Cooper reports business has been very dull this summer, but the prospect ahead is excellent, owing to the immense crops now being harvested. This architect has now under way at Independence, Oregon, a two-story brick bank building, 33 by 40 feet, cost $5,000.

Milwaukee, Wis.—At the next regular meeting of the Common Council, resolutions will be introduced materially changing the plans of the Central Police Station being constructed on the corner of Broadway and Oneida streets. The most important alteration will be the conversion of the large room on the third floor intended for a drill-room, into a municipal court-room, with necessary adjuncts, such as quarters for the juries, clerk of the court and other attaches. Twenty feet of a lot on the other side of the alley will be purchased, and a patrol barn erected.

Work has been commenced on the Colby Block, corner of Milwaukee and Mason streets The building will have a frontage on Mason street of 120 feet, on Milwaukee street of 100 feet, and will be five stories in height. The foundations will be of stone and the superstructure of brick, with stone trimmings. The cost is estimated between $150,000 and $200,000.

Building permits have been issued to C. W. Reitman for a dwelling on Third street, to cost $6,000; Chris. Templin, store for Frank Tœpper, on National avenue, Eighth Ward, cost $2,500; F. Piepenhagen, frame dwelling for C. Fanning, on Farwell avenue, First Ward, cost $3,400; C. Schuckneeb, frame dwelling for M. Sweet, Farwell avenue, First Ward, cost $6,000; C. Templemann, church, corner Brown and Fond du Lac avenues, Ninth Ward, cost $5,000.

Minneapolis, Minn.—The newspaper building, at the corner of Fourth street and First avenue, south, is receiving the roof timbers, and is the tallest structure in the city, next to the West Hotel. The portion built is only a section of the building designed and to be built by a company of capitalists, but the time is an indefinite one when the remainder will be erected.

The Union Depot foundation, which constitutes the basement or first floor, is completed. The superstructure will follow with rapidity. It is expected that the building will be fully enclosed by the last of September and ready for occupancy December 1.

L. F. Menage has commenced the erection of another three-story frame building on Sixth avenue, north, and Eleventh street, 44 by 66 feet, and to cost $10,000. It will contain three stories, and the two upper floors will be cut up into flats.

Architect Buffington has in contemplation a European trip, largely one of study, and hopes to be able to get away this fall. He will not undertake to build the house he proposes, adjoining T. J. Buxton's, until his return.

Mr. H. W. Phelps has commenced work on his block, on First avenue, south, near Second street. It is to be 57 by 62 feet and four stori s high, and will cost about $20,000.

The Holy Rosary Church society is to build a three-story brick school-house on Sixth street, south, between Nineteenth and Cedar avenues. The building will be 75 by 96 feet, and contain six school-rooms, cost $25,000.

The St. Paul & Northern Pacific has commenced work on its twelve-stall roundhouse on their grounds near the foot of Tenth avenue, north.

Architects Kees & Fisk report the following on hand: Pilgrim Congregational Church, corner Fourth street and Lyndale avenue; main audience room is 56 feet square, with a suite of parlors in the rear, 18 by 25 feet; size of whole building, 76 by 80 feet; cost $12,000. Fourth Baptist Church, a brick veneered building; main audience room is 43 by 57 feet; one class room 28 by 30 feet, and one 28 hy 17 feet; size of whole building, 64 by 110 feet. An addition to the University of Dakota, at Grand Forks, 30 by 50 feet, two stories and basement, brick with stone trimmings; cost $11,000. A three-story block, on Washington avenue south, between Thirteenth and Fourteenth avenues, of brick, 40 by 80 feet; cost $16,000; for Kenyon Bros. Residence for E. P. Sweet, 36 by 50 feet; cost $6,000. Residence for J. W. Johnson, on Stevens avenue, 64 by 110 feet; cost $7,500; probably will not be finished this year, hut will be under roof. Double block for B. Cooper, 80 by 90 feet, trimmed with artificial stone, three stories high; cost $15,000.

Architect Chas. S. Sedgwick has on hand: A residence for Mr. J. E. Bell, cashier Hennepin County Savings Bank, on Park avenue, near Twenty-fourth street, 62 by 72 feet, of pressed brick, terra-cotta trimmings, finished in hardwood; cost $20,000. A brick house for C. A Bicknell, 20 by 40 feet; cost $2,000. A house for Prof. C. A. Tracy, Madison, Wis.; cost $3,000.

Architect L. W. Kelly has on hand: Four brick veneered tenements on Eleventh street, near Hennepin avenue, for Mr. Abraham, three stories and basement, 60 by 80 feet; cost $10,000. Two stores and office buildings, four stories high and basement, 60 by 60 feet; heated by steam, elevator, etc.; brick with terra-cotta trimmings; for Messrs. Bissell & Jackson; on Nicollet avenue, between Seventh and Eighth streets; cost $30,000. Hotel on Second street and Tenth avenue south, for Thomas Sexton, 40 by 120 feet, four stories and basement; cost $10,000. Double tenement on Second avenue south and Fourteenth street, for J. O. Breeding; brick veneered; cost $7,000.

The following building permits have been issued recently: B. Aaronson, three-story triple-brick store and flats, 31, 33 and 35 Central avenue; $15,000. Robert Johnson, one-and-a-half-story six-room wooden dwelling, corner of Eighth street and Seventeenth avenue southeast; $1,000. Robert Jameson, one-and-a-half story six-room wooden dwelling, Eighteenth avenue and Seventh street southeast; $1,000. Minneapolis Glass Company, factory and furnace building, Fort avenue, between Thirty-fifth and Thirty-sixth street south, cost $40,000; work is to be commenced at once. Davison, two-story four-room addition to wooden dwelling, Portland avenue, near Twenty-third street, cost $3,300. C. W. Prouty, two-story eight-room wooden dwelling, Pleasant avenue, between Twenty-seventh and Twenty-eighth streets, cost $2,800. J. A. Kennedy, two-story wooden double tenement, eight rooms each, Fifth avenue southeast, between Second and Third streets, cost $6,000. Mrs. F. B. Kinne, one-and-a-half-story wood barn and two-story eight-room wooden dwelling, Stevens avenue, between Thirty-first and Thirty-second streets south, cost $2,800. F. Zesbaugh, two-story eight-room wooden dwelling, Forest avenue, cost $1,500. R. E Trafton, two-story nine-room wooden dwelling, south side Eighteenth avenue north and Ninth street, cost $3,300. L. F. Menage, three-story brick double store and tenements, Sixth avenue, between Tenth and Twelfth streets north, cost $10,000. J. R. Young, seven-room wooden dwelling, east side Third avenue south, between Thirty-third and Thirty-fourth streets, cost $1,200. J. C. Flynn, seven-room wooden dwelling, same location, cost $1,200. Peter Fredholm, eight-room wooden dwelling, west side Pleasant avenue, between Twenty-seventh and Twenty-eighth streets, cost $1,600. James G. Houghton, seven-room wooden dwelling, south side Twenty-seventh street, between First and Stevens avenues, cost $1,800. A. Harung, dye house, northeast side Fifth street, between Tenth and Eleventh avenues south, cost $1,500. A. Haring, alteration of wooden dwelling, northeast side Fifth street, between Tenth and Eleventh avenues south, cost $1,000. J. C. Pierson, eight-room wooden dwelling, west side Three-and-a-half avenue, between Thirty-third and Thirty-fourth streets, cost $1,500. James Bremen, seven-room wooden dwelling, same location, cost $1,200. J.W. Adams, same sized dwelling in same location, cost $1,200. P. F. Roedler, eight-room wooden dwelling, same direction, cost $1,800. A Johnson, eight-room wooden dwelling, same direction, cost $1,200. Perrine & Darrow, ten-room wooden dwelling, east side Three-and-a-half avenue south, between Twenty-sixth and Twenty-seventh streets cost $2,500. Andrew Charles, double wooden tenement, corner of Seventeenth avenue south and Twenty-fifth street, cost $3,000. George H. Holt & Sons, two-and-a-half-story dwelling, corner of Park and Sixteenth avenues south, cost $7,000. John Hidlund, double store, two stories, corner of Twelfth street and Twentieth avenue south, cost $4,000.

Mitchell, Dak.—Building is not as brisk in town as it was last year, but more is being done in the country. A number of houses are being built in town costing from $900 to $1,500, and prospects are good for more improvements in the fall. Work has been begun on an artesian well for supplying the city with water. Architect H. J. Bingham reports the following work on hand: The College of Arts for the Dakota University and College Alliance. A modified Venitian-Gothic building three stories in height, with loft, basement, and having two fronts 107 and 87 feet respectively, with a depth of 40 feet. It is being built of red granite with trimmings of a lighter stone. The basement contains the dining-room, 25 by 60 feet, with kitchen joining; also a gymnasium, heating and store rooms. The first floor will have the parlors, music and recitation rooms, chapel, library and reading room and a small office. The second and third floors will be fitted up as dormitories and parlors for the students, with one or two recitation rooms and a society hall. Cost $30,000; N. Perry, master mason; C. Washburn, carpenter. Also four-room school building, rooms 23 by 40 feet, with cloak-rooms attached. Built of wood in modern style with steep roof. Contract price above foundation, $5,980; Hutchins & LeBarre, builders.

New Orleans, La.—Rather slack just now; principal work, repairs and small cottages.

Architect James Ferret reports the following under way; For the Sisters of the Good Shepherd, a three-story brick convent, 260 hy 175 feet, cost, complete, $60,000; J. A. Muir, contractor. For Mrs. de Leypel and Mrs. Wadworth, alterations to four-story brick store building, 42 by 127 feet, cost $10,000. For S. Chalaron's agent, three-story building for restaurant, etc., 32 by 115 feet, cost $7,500. For Mrs. Jno. O'Brien, alteration to two-story frame residence, 43 by 120 feet, cost $5,500.

New Ulm, Minn.—Architect J. Brendt reports: For Judge W. Webber, two-story frame and veneered residence, 22 by 34 feet, cost $2,000; under way. For County Treasurer P. Pfefferle, two-story frame, brick-veneered dwelling, 30 by 36 feet, cost $2,600; under way. For Mr. F. Hogan, frame dwelling, cost $500. Same for Mr. F. Behmler. For Mr. J. Havensein, three-story stone refrigerator building, 26 hy 80 feet, cost $4,000; under way. Also several small cottages ranging in cost from $800 to $1,500.

North Springfield, Mo.—Outlook very good. Architect S. B. Abbot reports in contemplation a wagon-factory building to cost $20,000. Also street-car stables to cost about $18,000. The following are under way: For Mr. D. D. Sheppard, a two-story frame villa, cost $3,600. For Mr. M. A. Sombort, a one-story English cotttage, to cost $2,100. For Mr. T. McKibben, a one-story modern cottage, cost $1,500. For Mr. Ed. Fay, a two-story suburban cottage, cost $2,300.

Architect A. P. Wright reports: For Rexinger, Adams & Co., six one-story six-room cottages, cost $1,200 each; C. E. Bunker, builder. For Henry Scholten, two-story seven-room dwelling, cost $4,100; S. Browning, builder. Springfield R'y Co,'s car stable, one-story, brick, 60 by 150 feet, gravel roof, cost $7,900; E. Rosenberry & Son, builders. For Jas. McCabe, two-story brick store building, 20 by 66 feet, cost $3,200; C. E. Bunker, builder. For Wm. Carry, two-story brick store building, 20 hy 66 feet. cost $2,950; C. E. Bunker, builder. For Dunnegan & Bushnell, three two-story brick stores, 60 by 66 feet, cost $9,100; C. E. Bunker, builder. For John Kelly, two-story brick store building, 18 by 100 feet, $6,300; L. Browning, builder. Thayer Congregational Church, frame, 42 by 66 feet, cost $4,000; Mr. Upton, builder. Christian Church at Bolivar, frame, 30 by 58 feet, cost $5,300; G. W. Thompson, builder. For A. P. Wright, one-story six-room cottage, cost $5,950; A. P. Wright, builder. All the above are under way.

Omaha, Neb.—Architect Sidney Smith reports business lively, but prospects for fall work are not now very promising. The following are now under way: For Henry Williams, a three-story brick, with terra cotta trimmings, 22 by 80 feet, cost $6,000; Wentworth & Co., builders. For F. G. Rubles, a frame cottage, 26 by 48 feet, cost $3,500. For T. M. Arnout, a frame cottage, 24 by 40 feet, cost $2,400; P. Hendrickson, builder. For J. W. Shenrock, a frame cottage, 24 by 40 feet, cost $2,200. For R. W. Patterson, a two-story and basement building, 22 by 66 feet, brick and terra-cotta, cost $7,000; day work.

Architect C. F. Driscoll reports: For Mr. Thomas Murray, a five-story and basement block, 60 by 132 feet, cost $50,000; under way. For Mr. J. N. Paul, at St. Paul, Neb., a two-story and basement building, 48 by 80 feet, cost $9,000; projected. For School District No. 37, Douglass county, Neb., a two-story school building, 40 by 60 feet, cost $5,000; projected. For School District No. 3, Douglass county, a one-story school building, 26 by 50 feet, cost $2,500; under way.

Ottumwa, Iowa.—Architect Edward Clark reports the following: For M. E. Church Society, at Agency City, Iowa, a brick and stone church, 38 by 54 feet, shingle roof, stained glass windows, audience and lecture rooms connected by sliding doors, cost $3,800; J. S. Shadford, builder. For J. O. Hunnell, at Eldon, Iowa, a two-story brick store building, 28 by 64 feet, Milwaukee white brick, trimmed with stone and galvanized iron, gravel roof, to cost $3,000; projected.

Rochester, Minn.—The foundation of the Third Ward School-house is being put in rapidly and is about ready for the furnaces. Mr. Buttles has charge of the work. A 26 by 40 foot ad lition is being built at the poor farm. Improvements and additions are under way that will cost about $3,000.

Salina, Kas.—Architects Krueger & Parker report the building outlook is excellent. Have commenced Catholic school building, 26 by 42 feet, two-story frame, with stone basement, cost $4,000. For Mr. H. S. Hayward, two-story frame residence, 36 by 28 feet, cost $3,000; projected; contract not let. For C. R. Underwood & Co., two-story brick mill, 36 by 36 feet, cost $15,000; work commenced on foundations; John Nelson, contractor. For Hale Donnerger, at New Cambria, gram elevator, 32 by 64 feet, capacity 20,000 bushels, cost $45,000; projected. For Mrs. Meyers, two-story frame dwelling, 16 by 32 feet, cost $1,200; under way.

Silver Creek, Ky.—Prospect for building good. Architect C. S. Roop reports: For F. M. Arbuckle, tobacco barn, 40 by 80 feet, cost $900. For Mrs. A. Braddus, tobacco harn, 40 by 50 feet, cost $550. For S. H. Smith, tobacco barn, 44 by 120 feet, cost $1,000. Also one, 40 by 120 feet, cost $1,000. For Judge Breck, tobacco barn, 36 by 70 feet, cost $600.

Sioux Falls, Dak.—Architect W. L. Daw has recently completed the Commercial Hotel building, four stories high, 70 by 100 feet, containing 100 sleeping apartments, cost $40,000; E. L. Carter, builder.

Springfield, Mo.—Architect W. L. Foley reports an improvement on the outlook reported in July issue. Projected: For Mr. John Wall, at North Springfield, Mo., a three-story brick business block, 66 by 90 feet, to cost $15,000. The following are under way: For Mr. Chas. Conlon, one-story frame cottage, cost $1,500. For Mr. Thos. Kersey, one-story frame cottage, 30 by 30 feet, cost $2,000; Thos. Conlon, builder of both the above. For the Springfield Electric Lighting Company, one-story brick building, 25 by 46 feet, cost $2,500; H. B. Grubbs, builder.

St. Louis, Mo.—A general depression in business is being experienced here, and with the building trades it is exceedingly dull. Some of the architects have been compelled to discharge their office help. In asking the opinions of prominent men in the building lines, one is answered by all in about so many words, "It is very dull." Many, however, anticipate a lively fall business, and are making preparations for it.

Architect A. Druiding reports: For St. Mary's congregation, at Huntingburgh, Ind., a brick church building, 50 by 114 feet, in Gothic style, tower 130 feet high, cost $18,000; work has just been commenced. For the Society of the Sacred Heart, on Prescott avenue, frame church building, 40 by 80 feet, cost $4,500; just commenced. For the German Catholic congregation in Chippewa Falls, Iowa, brick church building, 50 by 90 feet, cost $14,000; under way. For the Benedictine Sisters, at Ferdinand, Ind., a convent building, to cost $50,000; under way; contract sub-let. For Society of the Immaculate Conception, at Ottoville, O., a church building, 66 by 165 feet, with seating capacity of 1,043, two towers, transcept, cost $40,000; under way. For the St. Francis Sisters of St. Louis, a school building, cost $11,000. For Roesheim, St. Louis, a two-story stone front dwelling, to cost $12,000.

Architect Chas. K. Ramsey reports: For Mr. I. P. Riddle, a modern brick residence, 35 by 70 feet, cost $12,000; nearly finished. For Messrs. Wm. O. Gibson & Son, three-story brick, 25 by 75 feet, cutstone front, store with flats above, cost $10,000; about finished. For Mr. W. P. Mullin, two-story brick dwelling, 33 by 58 feet, interior handsomely finished, cost $10,000; ready for roof. For H. N. Hudson, two-story modern dwelling, 28 by 54 feet, cost $7,000; first story up. Mr. Ramsey is building for himself a two-story frame dwelling, 26 by 37 feet, cost $3,000. Also making alterations and improvements to private residences of Mr. Daniel Catlin, Mr. J. C. Birge and Mr. Chas. F. Tatum.

Architect Geo W. Pipe reports: For Mr. P. Grimes, two two-story and cellar frame dwellings, 16 by 41 feet, each to cost $1,400; work about to be commenced. For Mr. Nelson, two two-story store buildings, 40 by 60 feet, and four two-story flats, 80 by 40 feet, on rear of same lot, fronting on side street, total cost of improvement $15,000; projected.

Architect W. G. Gains reports: For Mr. K. L. Dunn, two-story brick, 22 by 61 feet, cost $5,000; under way; contract sub-let. For Mr. Henry Hart, two-story frame, 20 by 47 feet, cost $2,500; under way. For Mr. Jos. E. Leroy, two three-story office buildings, each 28 by 60 feet, and to cost $8,800; projected; receiving bids. Also preparing plans for two smaller store buildings and alterations.

Architect H. E. Peipers has just finished the St. Louis College of Pharmacy, a three-story brick, 40 by 80 feet, stock brick front with stone trimmings, cost $10,000. Also stone front residence, 23 by 75 feet, for L. Raminski, cost $7,000. Just completing the South St. Louis Turner Hall, two-story stock brick front, stone trimmings, 40 by 116 feet, cost $7,000.

Architects Jas. Stewart & Co. are preparing plans for eight stone front residences, to cost $6,000 each. For Mrs. Helen Mueller, two two-story bricks, twelve rooms, cost $3,500. Also finishing the McLean building and the Neidringhaus building. Has also about completed Judge McKeigan's residence on Vandeventer place. The building has cost $12,000. Mr. Stewart intends erecting an Eastlake residence for himself this fall.

Architect Chas. F. May has plans for a twelve-room tenement building for Mr. Herman Juergens, to cost $4,500. Just finished, a three-story store and dwelling for Mr. John Oberreider, cost $5,000, and an eight-room residence for Mr. Conrad Roeder, cost $5,000.

Architects Geo. I. Barnett & Son are just completing the Britton A. Hill flats, on Olive street, just below Grand avenue. They are said for interior arrangement and convenience to be unrivalled in the city. Cost $21,000.

Architect Isaac S. Taylor has completed the four buildings for the Mullanphy Association, on Eighteenth and O'Fallon streets.

Architect O. P. Koenig has on hand, for Mr. Solomon Marx, three two-story brick stores and tenements, cost $3,000; Jos. Weis, builder.

Architect B. J. Goesse: For Mr. Joseph Tegschoff, five brick stores and tenements on St. Louis avenue, cost $11,500; H. Brinkmeyer, contractor. For Mr. Wm. Waschmidt, two-story eight-room dwelling, with mansard roof, cost $4,000; Louis Jaeger, contractor. For Elizabeth Schulte, two-story twelve-room dwelling, with mansard roof, cost $8,500. For Mr. Chas. Braun, two-story ten-room brick tenement, cost $3,750. For Elizabeth Mittlehuer, two-story tenements, twelve rooms, cost $3,700.

Architect E. Mortimer has on hand for St. Louis Mutual House Building Co., two-story eight-room dwelling, cost $3,000; J. H. Dunlap, contractor. For Mr. P. McGrath, two-story eight-room stone front dwelling, cost $4,800.

Architect Jos. E. Truitt: For Mr. Chas. Walter, two two-story brick dwellings, twelve rooms, cost $4,000. For Mr. John B. Glannie, two-story six-room brick dwelling, cost $2,500.

At a meeting of the Building Committee plans were approved for the new Carr School, to consist of six rooms and a kindergarten, cost $20,000.

Among the permits issued during the past month are the following: Dr. W. E. Richardson, two-story nine-room brick tenement, cost $5,000; Eden Reed, contractor. Schindler Farrer, hall 44 by 90 feet, cost $4,500; H. Wanscheffe, architect and contractor. Huelteman Bros., soap factory, 50 by 110 feet; F. Ueberle, architect, Wm. Herminghaus, contractor. Church of the Holy Communion, addition to stone church, cost $2,000; F. D. Lee, architect, L. M. Ross, contractor. Com. Mut. Ins. Co., five-story brick store, 81 by 125 feet, cost $50,000; C. E. Illsley, architect, F. C. Bonsack, contractor. Thos. Gugerty, two-story six-room brick, cost $2,500; Gugerty, architect and contractor. Hubert Mueller, two-story ten-room, mansard roof, cost $3,200; Aug. Stade, contractor. St. Louis Board of Public Schools, three-story six-room brick school, 64 by 38 feet, cost $13,900; Wilhelmi, architect, M Britt, contractor. E. P. Dickson, two brick dwellings, two-story, cost $3,000; Dickson, contractor. Domino Signiago, brick and stone front dwelling, two-story, cost $7,000; P. F. Meagher & Son, architects; contract sub-let. Hugh L. White, two brick dwellings, two-story, eight rooms, cost $10,000; H. E. Isaacs, architect. John Ritter, two-story eight-room brick, cost $4,000; W. C. Shafer, architect, H. Heitman contractor. Eugene Keleher, three-room brick, cost $2,000; Kneuppel, contractor. J. W. Mueller, two-story six-room, mansard roof, cost $4,000; Wm. Gahl, contractor. Jos. Baumgarten, two-story, sixteen-room tenement, cost $4,000; Wm. Gahl, contractor. Mathias Obrecht, three brick tenements, two-story, eighteen rooms, cost $5,900; W. C. Schafer, architect, A. Dietz, contractor. Jacob Hein, two-story twelve-room brick tenement, cost $3,900; O. P. Koenig, architect, G. Boettinger, contractor. Nicholson Bros., two-story twelve-room double brick dwelling, cost $3,200; Kuns, architect, H. Redmond, contractor. Mary S. Landecker, two-story six-room brick, cost $3,450; Jno. Marquardt, contractor. German Presbyterian Church, two-story, mansard roof, cost $3,600; J. Lindsley, architect and contractor. Louis Kohlby, three two-story brick tenements, fifteen rooms, cost $3,500; contract sub-let. Leo Nagel, two-story six-room brick and stone front dwelling, cost $4,000; A. E. Cook, contractor. Schaefer Bros. & Powell, two-story warehouse, 48 by 145 feet, cost $9,000; N. Resse, contractor. Schafer Bros. & Powell, brick boilerhouse, 32 by 75 feet, cost $4,000; N. Resse, contractor. James Verdin, two two-story bricks, twelve rooms, cost $4,500; G. M. Theobolt, contractor. John W. McCullough, two-story six-room stone front, cost $6,000; J. W. Grath, architect, N. Wickwire, contractor. Adolph Koelm, two tenements and stores, two-story, fifteen rooms, cost $4,800; A. Beinke, architect, F. Tiemann, contractor. Thos. McNeary, addition to Uhrig's Cave hall, two-story, ten rooms, 18 by 115 feet, cost $4,000; J. B. McElfatrick, architect, —— contractor. Mrs. M. Hahne, two-story, nine-room tenement, cost $3,000; H. Brunt, contractor. Joseph Kaminski, two story twelve-room tenement, cost $3,000; Beckemeier & Reickmann, architects and contractors. Geo. Enger, two-story six-room brick dwelling, cost $3,000; J. C. Brockmeier, contractor. Wm. Human & Bros., two-story twelve-room double tenement, cost $4,200; L. Jaeger, contractor. Frank Deister, two-story twelve-room double tenement, cost $3,700; G. M. Roeder, architect and contractor.

The following permits have been issued since August 13: S. H. Hoffman, two-story, eleven-room, brick dwelling, on South Delmar avenue, between Cabanne and Vandeventer streets, cost $9,700; S. H. Hoffman, architect and builder. John Gerst, two adjoining double brick tenements, on corner of Elliot and Mullanphy, two-story, cost $7,300; B. J. Goesse, architect; Bothe & Rattermann, contractors. T. R. Vickory, two-story and mansard, ten-room dwelling, on Dickson street, between Garrison and Ewing streets, cost $5,000; Kirchner & Brother, architects; McCormick & Son, contractors. H. Erbrugger, two adjoining two-story bricks, ten rooms, on Salisbury street, between Thompson and Glasgow streets, cost $6,000; H. Erbrugger, builder. John Payken, two adjoining brick dwellings, two-story, sixteen rooms, on Cass avenue, between Hogan and Nineteenth streets, cost $7,000; J. B. Goesse, architect; Adam Bauer, contractor. Frank Vollmer, two adjoining brick dwellings, two-story, twelve rooms, on Maffitt avenue, between Second Carondelet avenue and Dollman street, cost $6,800; J. B. Goesse, architect; A. Bauer, contractor. Elizabeth Koenigskramer, three adjoining brick tenements, two-story and mansard, eighteen rooms, on Fourteenth street, between Hebert and Palm streets, cost $7,000; H. Heitmann, contractor. St. Louis Post-Graduate School of Medicine, brick college, two-story, nineteen rooms, 54 by 95 feet, on corcer of Lucas street and Jefferson avenue, cost $20,000; F. D. Lee, architect; S. M. Ross, contractor. Mrs. A. Pomeroy, two-story, nine-room, brick dwelling, on Delmar street, between Pendleton and Taylor streets, cost $5,000; F. J. Capitain, architect; W. J. Hegel, contractor. John Cowhey, four adjoining brick tenements, twenty-four rooms, corner of Barton and Menard streets, cost $9,000; W. C. Popp, contractor. J. F. Murphy, two-story, nine-room, stone front, stores and tenement, on Sheridan avenue, near Easton street, cost $5,000; H. W. Kirchner, architect; P. Mulcahey, contractor. Jos, Schnaider Brewing Co., brick stable, 40 by 176 feet, corner of Twenty-first and Papin streets, cost $10,000; R. A. Berger, architect; contract sub-let. Dr. Bierwith, two-story, six-room, brownstone front, corner of Jefferson and Rutger streets, cost $5,500; Beinke & Co., architects; C. H. Poestner, contractor. St. Louis Mutual House Building Co., four adjoining brick tenements, two-story, twenty-four rooms, on Luckey street, between Grand and Spring streets, cost $7,500; E. Mortimer, architect; J. V. Majors, contractor. F. C. Bonsack, two-story and mansard ten-room dwelling, on Russell street, between Compton and Louisiana avenues, cost $7,000; F. C. Bonsack, builder. Schaefer Bros. & Powell, two-story warehouse, 63 by 145 feet, corner of Kosciusko and Barton streets, cost $12,000; Nicholas Risse, contractor. A. P. Ghio, three-story, fourteen-room, store and tenement, on Eleventh street, between Pine and Olive streets, cost $6,000; I. Taylor, architect; H. Braun, contractor. Dr. J. G. Steadman, two adjoining brick dwellings, on Pine street, between Leffingwell and Ewing streets, two-story and mansard, twenty rooms, cost $16,000; Z. T. Knott, architect and contractor.

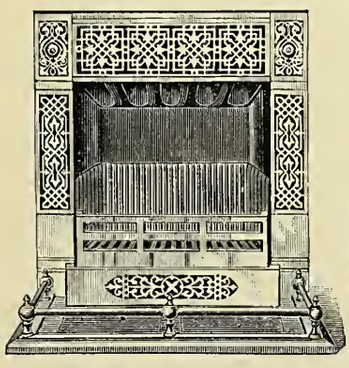
St. Paul, Minn.—There are ten brick stores under way on Dakota avenue, and five at the intersection of Seventh and Farquier. A three-story brick hotel, costing between $6,000 and $7,000, has just been completed on Seventh near Farquier. William Constans will soon commence a large brick block, 90 by 100 feet, and four stories high, next to the three-story block he erected on the corner of Seventh and Waconta last year. He will raise his three-story block to a height equal to its new neighbor, the cost of the whole improvement being estimated at nearly $10,000. Charles McDonald is clearing away the débris of the late fire on Seventh street near Wabasha, preparatory to the erection of a block of stores. In Auerbach & Hand's addition west of Rice street, and in the vicinity of Riley & Martin's planing-mill, within the last three months more than 300 small houses have been erected, and on Arlington Hills, within the same time, fully 250 residences of the humbler grade have been built. A number of the owners of handsome houses on Summit avenue are further beautifying their property by laying in front thereof walks of octagonal stone, the dark and light colors contracting very prettily and the pave being smooth as could be asked. Commodore Davidson's new block, corner Fourth and Cedar streets, has been completed and is one of the most substantial and commodious structures in the city. The work of replacing the fire-proofing, replastering and repainting the Capitol building is about complete, as are the repairs in the caucus-room and adjoining corridors.

Architect H. S. Treherne reports: For Mrs. M. F. Eastman, double frame residence, 40 by 60 feet, cost $4,500; under way; Dowling & Ruse, builders. For Mr. Byron P. Baker, frame residence, 25 by 45 feet, cost $3,500; under way. For Mr. Benj. A. Provoost, frame residence, 30 by 45 feet, cost $3,500; under way; H. B. Larson, builder. For Mr. H. C. Davis, frame residence, 35 by 50 feet, cost $4,500; under way. For Rt. Rev. Bishop Grace, mortuary chapel, 24 feet octagon, cost $4,000; under way; J. H. Donohoe, builder. For Cyrus J. Thompson, double frame residence, 65 by 50 feet, cost $11,000; under way; E. O. Erickson, builder. For Mr. W. C. Goforth, frame residence, 30 by 45 feet, cost $3,000; projected. For Mrs. K. N. Whitney, frame residence, 50 by 55 feet, cost $12,000; projected. For Mr. C. C. Jones, frame residence, 25 by 40 feet, cost $3,000; projected. For Rev. P. B. Murray, frame church, 30 by 60 feet, cost $3,500; projected. For Rev. Ambrose Iethert brick church, 40 by 80 feet, cost $12,000; under way. For Mr. Dan Elliott, brick hotel building, 25 by 60 feet, cost $8,000; projected. For D. I. Donovan, a brick church building, 30 by 60 feet, cost $5,000; under way. Among recent permits issued are the following: Charles Hoffman, two-story frame dwelling house, 32 by 62 feet, on the south side of Selby, and between Arundel street and Western avenue, cost $4,100. Robinson & Carey, three-story frame warehouse, 50 by

EDWIN A. JACKSON & BRO.

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Heat-Saving and Ventilating GRATE.



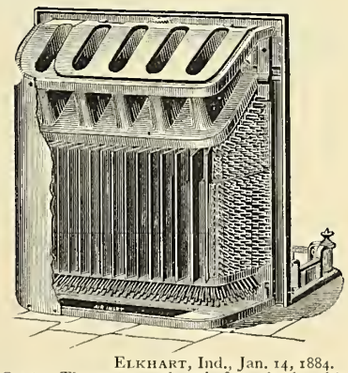
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

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F. A. BENHAM, M.D.

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100 feet, on the east side of the railroad, between Third and Fourth streets, cost $4,200. R. C. Libby & Co., one-and-one-half-story frame lumber shed, 16 by 125 feet, on the south side of Cascade street, between Oneida and Duke streets, cost $1,000.

Syracuse, Neb.—Architect Thomas Jones reports the building outlook is not good, although the good crops this season will make plenty of work in the country towns all through the State. At present engaged upon a two-story frame dwelling, 38 by 42 feet, for H. N. Carpenter, cost $4,000. For Charles Marshall, a two-story cottage, 22 by 40 feet, cost $900; and one-story frame cottage for Edward Andrews, 30 by 50 feet, cost $700; M. Young, builder.

Weatherford, Tex.—The new courthouse is to be 38 by 100 feet and 113 feet high, and will cost $60,000.

Wilmington, N.C.—Latimer Brothers intend building a $150,000 hotel.

West Bay City, Mich.—Very quiet. Outlook not as bright as might be.

Architect D. P. Clark reports for Joseph Ischanner: A two-story frame dwelling, 28 by 60 feet, cost $2,800; just completed; J. F. Sloat, builder. For Wm. Loose, three-story brick store building, 52 by 70 feet, Ohio stone and terra-cotta trimmings, cost $9,000; under way; Layton & Thompson, masons, Fred A. Peak, carpenter. For H. & H. S. Lewis, two-story brick store building, 24 by 60 feet, Ohio stone and black brick trimmings, cost $6,000; Henry Willis, mason; Fred. A. Peak, carpenter. Also Baptist church building, 52 by 70 feet, brick-veneered, containing auditorium, small chapel, choir and parlor rooms, cost $5,500; under way: Wm. Partridge, mason; Wm. Wolverton, carpenter.

Yankton, Dak.—Architect Albert E. Cobby reports the following: The new addition to the Morrison Hotel is nearly completed. The building was commenced in the fall of 1883, but was not covered in before winter, therefore no inside work could be done before spring. The building is constructed of chalk rock, veneered with pressed brick and trimmed with galvanized iron The size of the addition is 34 by 60 feet, three stories high, and making, with the hotel proper, a building 100 by 150 feet. The entire building is heated by steam, and the basement of the addition is fitted up with bath rooms for the purpose of using the magnetic water from an artesian well on the premises. The basement also has a completely arranged system of Turkish baths. The addition, with a few changes on the old part, will cost when completed about $12,000. Messrs. Thornton, Moulton & Co., contractors. The above firm have also under contract an addition to the Yankton courthouse, to cost when completed about $10,000, from plans of Mr. Cobby. Plans have also been completed by Mr. Cobby for an $8,000 dwelling for J. R. Sanborn, of Yankton. It will be finished throughout with yellow pine, heated by steam and plumbed for hot and cold water; it is to be built of Yankton pressed brick and trimmed with galvanized iron; style, Italian; Messrs. Thornton, Moulton & Co., contractors. Mr. Cobby also has plans on the board for three store buildings for Messrs. Dudley, Ritchie & Gross, hardware dealers, 75 by 100 feet, two stories and basement, pressed brick, galvanized iron trimmings. There are a great many smaller buildings under way, such as cottages, etc., ranging in cost from $500 to $1,500.

Youngstown, O.—At a special meeting of the Board of Education, August 22, a committee appointed at a previous meeting to examine the plans submitted by architects for a new school building in the Fifth ward, reported in favor of the designs presented by Architect C. H Owsley, which specify for a $9,500 building. The only change that the committee advise in the original plan is that stone be used for window and door caps instead of brick. A minority report, submitted by Mr. Hugh King, favored the designs submitted by Architect W. B. Ellis. The majority report was adopted after a spirited discussion, and a committee was appointed to suggest such changes in the plans as might be thought necessary.

[We do not know what kind of men this committee is composed of, nor do we wish to question their architectural ability, still we do hope they will have a care not to place their city's name upon the long list of those that have allowed their public buildings to be almost ruined by "a committee appointed to make suggestions to the architect."—EDS.]

York, Neb.—Outlook for fall work is not very encouraging. Some very fine buildings are projected and will be erected some time during the coming winter.

Architect W. H. Bell reports: for Mr. G. Wild, Gothic cottage, 30 by 40 feet, cost $2,000; nearly completed; Morgan & Green, builders. Mr. J. Eagleson, one-and-one-half-story Gothic cottage, 28 by 32 feet, cost $1,400; just commenced; O. Washburn, builder. For Mr. M. Beaver, cottage, 20 by 36 feet, cost $1,200; just commenced.

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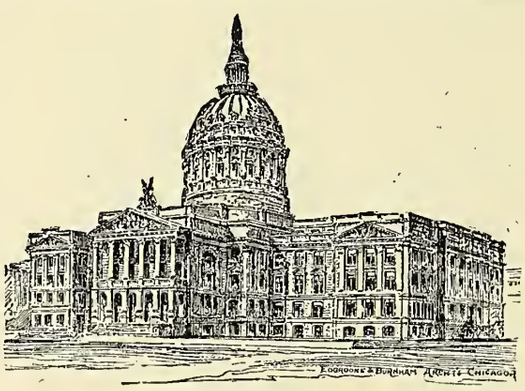
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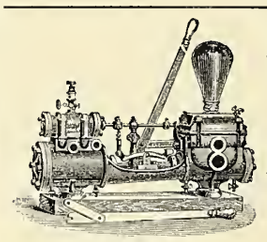
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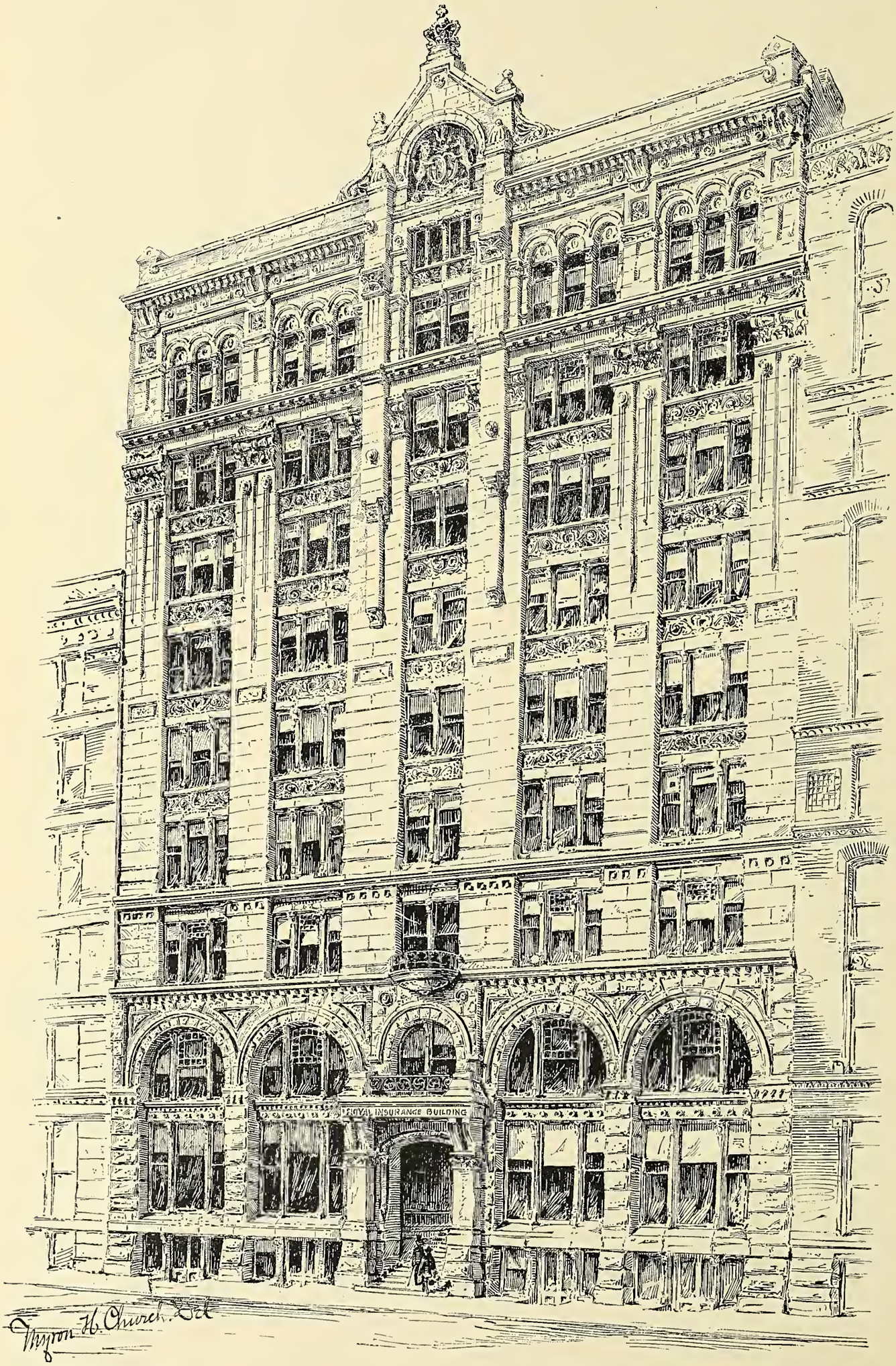
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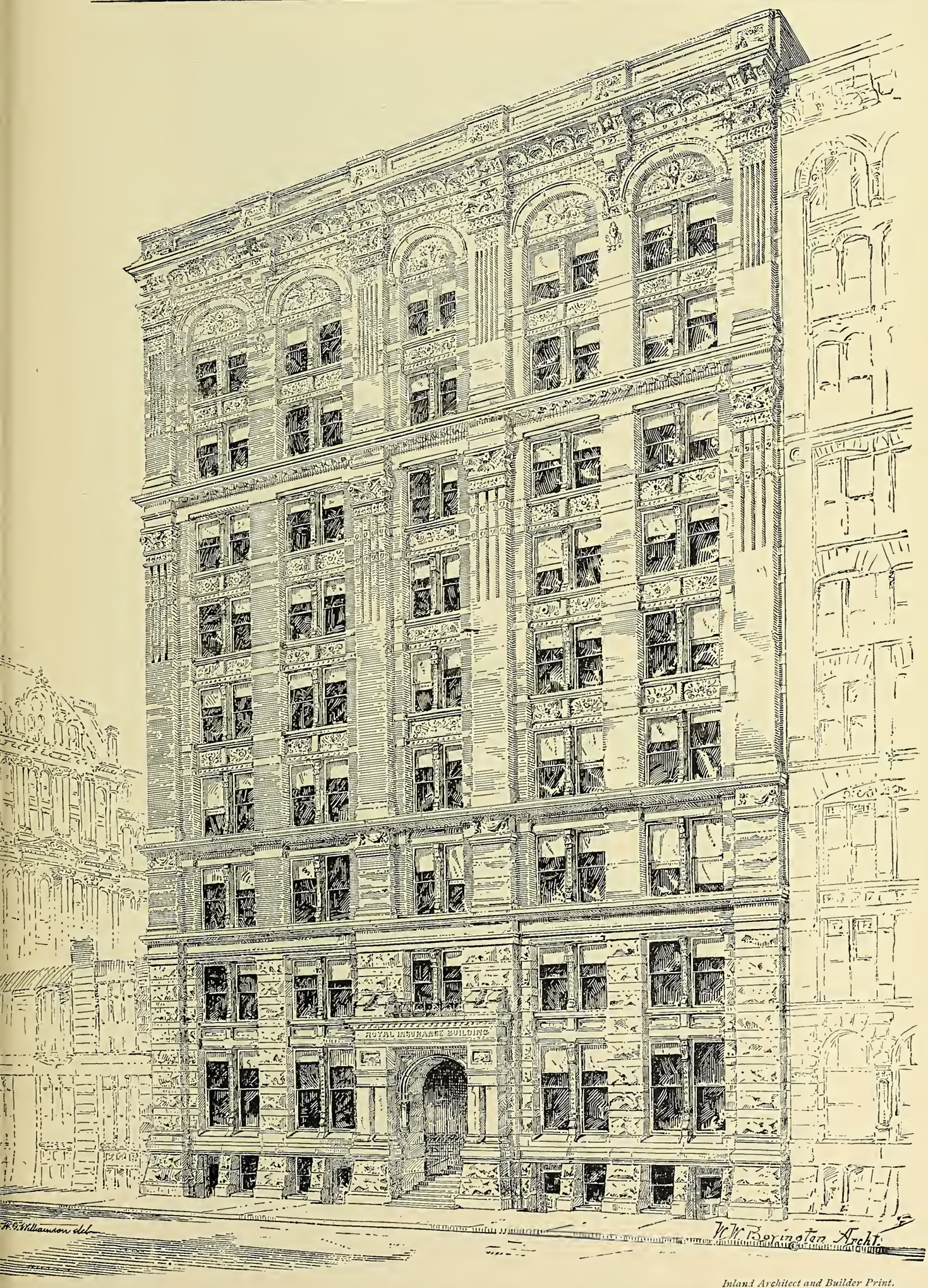
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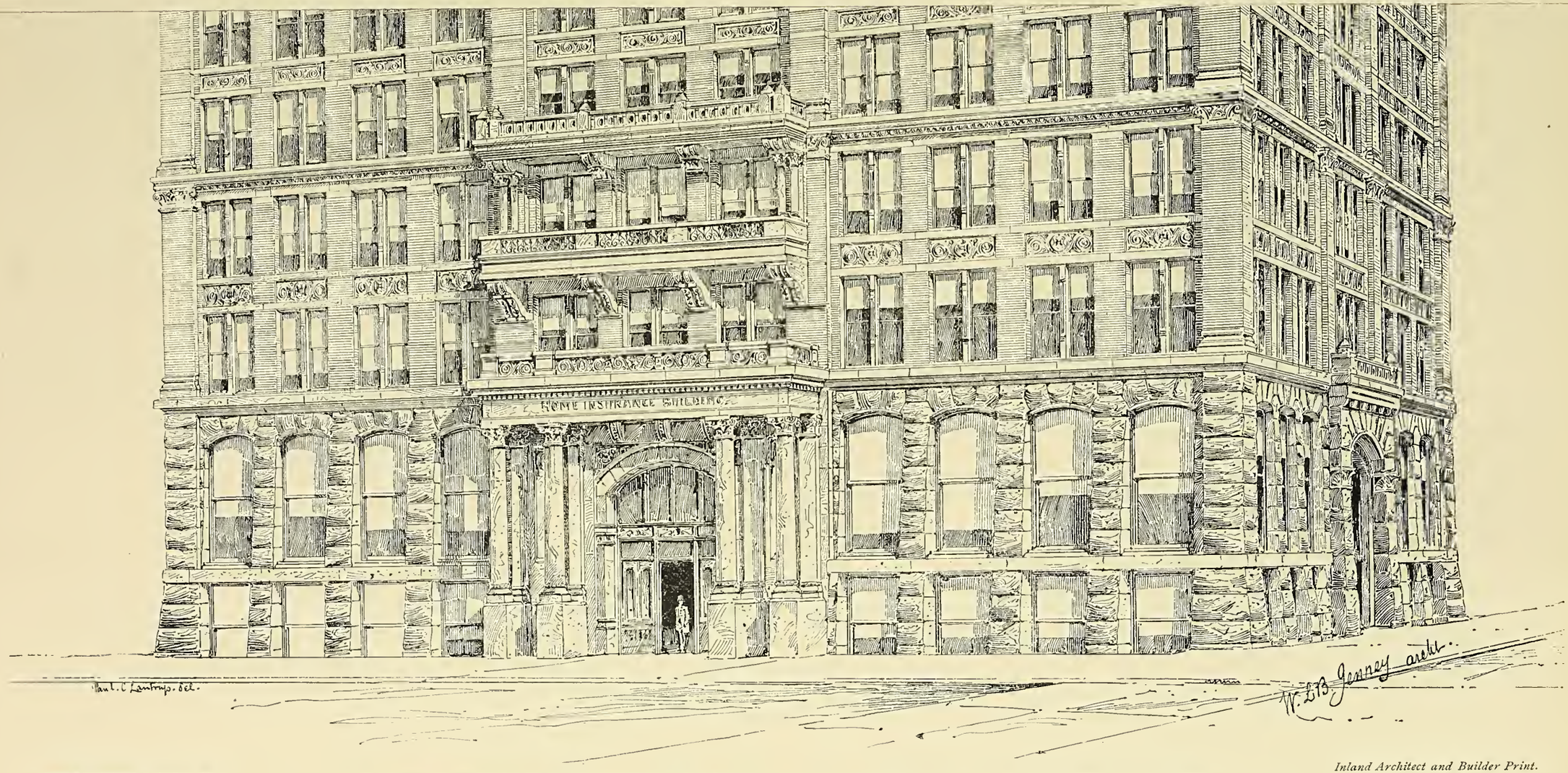
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THE

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THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on page 4 *Supplement*.

ARCHITECT GURDON P. RANDALL, one of the oldest of Chicago architects, died on the 20th ult. at his early home in Northfield, Vt., whither he had gone to regain health, which had been failing for some time. The remains were brought to Chicago and interred at Rosehill. Architect Randall commenced his architectural studies in the office of Ashar Benjamin, of Boston, and at the age of thirty removed to Chicago where, during a term of 34 years, he had become perhaps more widely known throughout the West than any other architect. His work was especially in the line of school houses and churches and also court houses of which he built a large number, some in distant states. He was the first architect to build churches in the much favored and copied amphitheatre style, his originating this style in the Union Park Congregational Church in Chicago giving him a wide celebrity as a church architect. Beside being an architect of wide information and an honor to his profession, Mr. Randall was a man of sterling worth, his broad nature and genial temperament drawing to him friends wherever he went, and his upright character securing to him a reputation for honesty and integrity that was always beyond reproach. As an architect of the old school, always true to the principles of his art, and designing with a broad and positive expression, his works will long stand as examples of the thorough work of a thorough man. His upright life will cause him to be deeply mourned by his brother architects, with many of whom he was most intimate in the early days of Chicago. His intelligence and ability is a loss to the entire architectural profession.

GRATIFYING indeed are the communications we are constantly receiving from architects in regard to the coming convention for the purpose of forming a Western Association of Architects; not alone from individuals but from local organizations, each with a hearty indorsement of the movement and a wish at least to be present on that occasion. Our contemporary, the *American Architect*, gives us words of encouragement, for which we as well as the entire profession in the west cannot but be grateful. Their suggestion regarding the attendance of Eastern architects is most kindly received, and the profession in the west will heartily welcome any who may be inclined to visit Chicago upon the twelfth of November. In our November edition such plans as have been perfected will be published, and meanwhile architects are earnestly requested to send in to this office any thoughts they may have regarding the needs of the profession in the west, and any suggestions that may prove of benefit will be gladly received. An examination of our news columns of the past few months will indicate some of the remarkable examples of architecture now under process of construction in Chicago, and it will amply pay any architect to visit the city, aside from the important object that is calling the profession together. Many architects have in person spoken favorably of the movement, and expressed an intention to attend, but have failed to send in their names for enrollment. As this is quite necessary in order to perfect arrangements, they would greatly favor us by an early response.

ARCHITECTS have seen the value of the suggestion of Architect Henry Lord Gay in regard to an architectural drawing exhibit, and are writing from all sections to secure space. There seems to be an inclination to send perspectives only, and this may be through a misunderstanding of the intention of the exhibit, but the plans and elevations of structures are greatly desired, as well as the more ornamental but, if anything, less practical perspective drawing. Among the applications for space is one from the architectural department of the Champaign, Ill., university, the desire being to show the visiting architects the work done in that department of the school. The time for preparation of the exhibit is short and architects should apply at once, stating as near as possible what they expect to contribute in the way of drawings.

THE State Council of France, at Paris, has passed an ordinance limiting the height of buildings in that city. The ordinance provides that the height of buildings be governed by the legal width of the public thoroughfare. For buildings on a line with the street, the height to include cornice and other ornamental work in line with the face of the front walls, the limit allowed is a height of 39 feet for those buildings on streets under 25 feet wide, a height of 38 feet 9 inches for those on streets from 25 feet to 29 feet wide, a height of 58 feet 6 inches for those on streets from 29 feet to 65 feet, a height of 65 feet for those on streets 65 feet wide or over. In buildings the fronts of which are back from the line of the street, the height may be 48 feet, 58 feet or 65 feet, under the condition that the space between the building and the street, added to the width of the street, will have a width of 25 feet, 31 feet or 65 feet respectively. It is also provided that no building be more than seven stories in height above

the basement, and that basements be not less than 9 feet between floor and ceiling. These regulations do not apply to public structures or private buildings of a monumental character, or those for the advancement of the arts, science or industry. The administration can authorize certain modifications in the cases of private buildings upon the request of the superintendent of private buildings and the approval of the secretary of the interior.

CANADA, and particularly the province of Ontario, is rapidly developing its resources, and in the line of building it is fast assuming a rank with cities of equal size in the United States. Without making invidious comparisons, the manner of building there can be favorably commented upon, and though much of the best work has been designed by American architects the honest and intelligent construction is creditable to the Canadian contractors. The government architect, Mr. Fuller, is a gentleman well qualified to control the public building of the Dominion, his work in the United States upon the capitol building at Albany being on a par with that of his later creations, of which the Parliament buildings at Ottawa are creditable examples. At Hamilton a custom-house is being erected which displays the resources of Ontario in the line of building stone; the material, which is from the Credit Valley, being a rich brown-stone. It is to be regretted that the custom of fireproofing buildings has not obtained to any appreciable extent in the Dominion. There are but two fireproof structures in Canada, one in Toronto and one in Montreal, while the custom-house at Hamilton referred to, costing $350,000, with its magnificent stone walls and brick division walls, is being constructed with an interior wholly of wood. An additional $100,000 would have given the people a building wholly fireproof and one of the finest buildings in the Dominion. Another building that should be mentioned in this connection is that of the Canada Life Insurance Company, at Hamilton, by Architect Waite, of Buffalo. It is built of Connecticut brown-stone, and in exterior detail and interior arrangement and finish is a model building. While the cost of building is governed by the public, the architect and the builder can do much toward introducing new ideas and improvements, and it is due to the future of that country that is daily growing in population and in enterprise, a republic in everything but the name, that the building in every particular should be fully up to the latest improvements in design and construction.

IT seems that although the United States first introduced the telephone, and especially those for long distances, Europe has not been slow to see its advantages. The long distance wires in England and Ireland have been strung on government poles and subject to a ten per cent tax. This is now abolished and there is a prospect of a decided revival in telephone interests. Mr. J. Malcolm Gilles, manager of the *Freeman's Journal*, of Dublin, recently visited the United States, for the purpose of seeing the best systems in operation here. In Chicago he found the center of telephonic use, where subscribers aggregate 3,200 against about 2,000 in the New York exchange, and at the Electrical exposition at Philadelphia he found all the best inventions in the line of telephone work. It is a singular fact that while numerous inventions have improved the service in the line of transmitters, key boards, etc., the last patent on the telephone proper was issued in 1877, and Mr. Gilles will take little back with him that has not already been introduced in Europe. The practical operation of telephone lines for a greater distance than 100 miles is still in the future, though lines have been experimentally worked for a thousand miles, showing that the possibilities are as great as those of the telegraph in its infancy, which period may describe the present stage of the long distance telephone.

THE bridge question which incorporates both the rights, privileges and moneyed interests of the trades interested in river traffic, and the convenience and rights of the public, has at last received the attention of that excellent body, the Citizens' Association. In the report just issued by the committee on street railways and bridges, Messrs. Owen F. Aldis and Edwin Lee Brown, which is an exhaustive consideration of the entire question, these gentlemen show a remarkable knowledge of the existing state of things, and advise practical remedies as well. Upon the bridge system, to which we have more than once directed public attention, and toward the remedy of which we are glad to have the valuable aid of the Citizens' Association, the committee report as follows:

> The conviction that the Chicago river has seen its most serviceable days in commercial sense is fast gaining ground, and citizens are hoping that the bridges may become fixed and permanent. This can not be accomplished within ten years. The lumber trade perceives that the change is necessary, and the warehousemen look for the site of an outer harbor along the lake shore. It will not be long before the river traffic will be confined to unmasted barges; its banks lined with commercial buildings, and with car-tracks and appliances for rapid transfer, the river shall become the best street in the city for the movement of heavy goods. * * * The street obstructions caused by the bridges, cannot be tolerated many years longer. New bridges in contemplation should be kept free from railroad tracks. * * * The following gives an idea of the traffic over the bridges in one day. September 10, going west over the Madison street bridge between 6 o'clock in the morning and 7 o'clock at night, there were 9,530 pedestrians, 881 horse-cars, and 1,671 other vehicles. Going east, there were 10,825 pedestrians, 900 horse-cars, and 1,354 vehicles. The bridge was opened 33 times, and 23 steam and 22 sailing vessels passed. The number of persons in horse-cars is estimated at 53,430, and on other vehicles at 6,050, making a total of 79,835 passengers who passed over. The greatest number of persons detained going west was 60 at 8:32 in the morning. The time of detention was six minutes and a half; the greatest number of vehicles detained going west was 40 of which 7 were street cars, at 5:27 o'clock in the evening; time of detention four minutes and a half. Going east the greatest detention of pedestrians was 200 at 8:30 in the morning, and of vehicles, 33, the detention being six minutes and a half.

These figures show without need of comment the extent of the bridge nuisance, and the suggestions of the Citizens' committee should be carried out. It is admitted that the first stage in the change will be in the way of stationary bridges, but the future must look to a harbor and docks in the lake, and the river a magnificent boulevard that will not only add to the traffic facilities of the city, but enhance the value of the adjacent property; a matter that should satisfy the interested owners of dock property along its banks. The work of these gentlemen of the Citizens' committee cannot be too highly appreciated by the people of Chicago.

WE reiterate our statement of last month in regard to the differences existing between the plumbers and the manufacturers that an amicable settlement will conserve the best interests of all. As yet the public have not been injured to any appreciable extent, but while the contention lasts the manufacturer is prevented from doing as much business with the plumber, and the plumber is prohibited by his association from over-stepping any of its rules. The latest phase is one that will directly benefit the public, and that is the evident tendency of plumbers to turn to their inventive faculties, and, from their practical knowledge of the wants of the trade, produce additional conveniences in the plumbing line which will place them in a more independent position toward the manufacturer as well. This the manufacturers cannot afford to allow while the plumber will still need the use of those inventions which the manufacturers now existing as such can supply. While we do not attempt to say how the idea of having manufacturing plumbers will strike the National Association of Plumbers, we do see a vast number of reasons why these two bodies should bend all their efforts towards a satisfactory settlement, their interests being so identical that either is injured by the existing controversy. We hope that this thought will have the earnest attention and decisive action of the convention which will meet on the 15th inst. at St. Louis.

ANOKA, a city of about three thousand inhabitants, situated about fifteen miles from Minneapolis, was entirely destroyed by fire a month ago, the loss reaching upwards of $700,000, and is already about one-third rebuilt. The city was the site of the Washburn flouring mills, and though it is not decided to rebuild these, the enterprising citizens are rapidly following the example of Chicago in '71, and a new city will rise from the ashes of the old. In fact the city for the past month has been a Chicago in miniature, as she looked in the days directly following the great conflagration. As the losses have been fully met in the majority of cases by the fire-insurance companies, the fire will soon be only a thing of the past, and will afford another example of the resistless quality of western enterprise and pluck.

INCENDIARISM seems to have become epidemic in the beautiful city of Cleveland; yet while the citizens seem to be active in their measures for the protection of property in the appointing of special police and even the forming of a vigilance committee, the thought comes to us, that her chief danger does not lie among her vast lumber yards, though millions of dollars of property have been consumed by incendiary fires, but in the peculiar position of the reservoirs of the Standard Oil Company. It is no uncommon sight to see oil running across the public streets from these works, and the topography of the city is such that their burning would send a wave of burning petroleum rolling to the river, where it would spread and the entire city be menaced, indeed, if not entirely consumed. How these works, more terrible than the largest powder magazine in the country in their destructive quality, came to be built in such a position, cannot be imagined, but with the warning already received and the evident incapacity of the city police to entirely protect property from fire, the citizens should make a decided demand for their removal, as the public safety is always of more importance than the financial interests of a private corporation.

ALL reforms work slowly, but no reform has wound its slow length along to such an extent with so little practical result as the abatement of the smoke nuisance. In Chicago the efforts to procure a clear atmosphere have led to some peculiar conditions. First came a city ordinance prohibiting the producing of smoke, and rendering owners of furnaces of any description liable to a fine. Then came a season when the law was ignored, and when action was forced by the public press excuses and evasions were allowed, and the last phase seems to be the recommendation of a certain "consumer" by the city, and while the use of any other complies with the law, the public are inclined to put them on, whether they use them or not, as they are assured that the fact of purchase will be a guarantee that they will not be further molested. This is better than no burner at all, and there is less smoke produced, but it is a singular thing to see the city government go behind the law and look at the furnace and not at the smoke-producing chimney. What we wish to point out is that there are many good, though there are no absolutely perfect devices. The best we have seen are not the most expensive, and that all furnaces should be provided with a good consumer as an economic measure outside of the law and the non-production of smoke. A good consumer will save fuel, and the proper way for the manufacturer to do is, not to listen to the recommendations of any solicitor, be he the owner of a consumer or a city officer, but examine the furnaces and chimneys of his neighbors, ask owners and engineers regarding them, and after full investigation and careful study of the conditions to be met in size and character of the furnace, the quality of the fuel burned, and last but not least, the sentiments of the engineer, who can make best of burners useless if he tries, choose that which best suits the case. When he has done this see that his neighbor does likewise, and then the air will be clear as it is in the heart of the city on Sunday.

Walls and Ceilings.

BY FRANCIS LE BARON.

THE wise old saw tells us that "walls have ears;" if they had tongues as well, we should be deafened by the outcry of their protest against the æsthetic decoration (desecration) that is plastered and daubed and piled upon them to the utter destruction of comfort, good taste, grace, beauty and refinement.

We have our house built,—it may be in Queen Anne style, with its pseudo-classic prettinesses, pettinesses and vulgarities;—or castellated-Gothic, with a draw-bridge over the street gutter, a man in paper armor with a penny trumpet to sound the approach of visitors and signal the fall of the port-cullis when necessary, and some poor old palmer, with scallop-shell on shoulder, pottering round the curb-stone, telling his beads; or it may have the grace, the beauty, the symmetry of the Italian-Gothic Renaissance, or imitate a Greek temple or Egyptian tomb, or be of the dry goods-box or Saratoga-trunk pattern, large, square, with holes pierced in it for windows, and compartments for lunch-box, night-dress, dinner-toilet, etc., or perhaps it is in the Front-step style, so prevalent in Chicago, where the grand, high, monumental structure of the front steps is the chief feature, and the house is added as an after-thought.

But whatever be the style of house, when it is finished there are the walls and ceilings staring down upon us in dumb, hard whiteness, and demanding with aggressive iteration, "What will you do with us?" In the answer to this question lies the whole art of decoration.

"Chacun a son goût" was a good rule for the immortal old woman, who kissed her cow; it is a good rule, also, *with reservations*, for the decoration of walls and ceilings. The gist of the French proverb lies in that one word, "*goût*" (taste) in which the French people are preëminent. Go with your own, individual taste to an artist decorator, and advise with him as to material, as to combinations of color, as to the thousand and one things that go to make an elegant home, and the result cannot fail to be satisfactory. Use your own taste, and outgrow its results, and try again, and you will have endless satisfaction. We went once on a time to a gentleman's house to see one of Turner's paintings; it was the only painting in the house, and the gentleman explained this apparent singularity and incongruity in a very elegantly appointed home, by saying: "This is the first picture of my third collection; I have outgrown two collections and sent them to auction." His taste had grown with the use of it, increased knowledge had changed and modified it, and yet it had given him perpetual satisfaction. He had enjoyed his collections until he outgrew them, then he had put them aside and made others by the light of a wider knowledge.

Tinting is not to be despised, it makes the house cheerful, and gives a good background for pictures and furniture. Soft rose-gray walls, with rose tinted ceiling, make a pleasant combination. When Whistler painted his rooms in white and bright yellow, the canons of taste were violated, and an outcry of dissent went up through the whole art-world, but he held his ground, and so conquered the canons, and to-day when he decorates in warm gray and flesh-color, his knowledge and good taste are conceded on all sides.

From calsomining we come to papering, and here a wide field opens before us. Wall-paper gives you more for your money than any other form of decoration, and its great beauty cannot be denied. At the cost of a few dollars your walls and ceilings are changed from a dull waste of grim whiteness to fields of soft color and harmonious form. The paper-designers draw their inspiration from all things in earth and heaven, the stars, the snow-flakes, the crystals, the vines and flowers, landscape and architecture, the blue expanses of air, the æriel depths of space, the glories of cloud and sunset, as well as the wide stretches of mountain heath and green meadow, they catch form and color from them all, and, fused in the fires of genius, they come forth like refined gold to beautify the walls and ceilings of our homes. Design has made an immense stride forward, in this direction. It is not many years since the colors and patterns of cheap papers were hideous, and the more important rooms of a house were covered with the heavy velvet and flock papers, dark green, deep maroon, dull crimson; they acted like a pall upon the spirits, like the cloud of ashes that fell from Vesuvius on Herculanæum and Pompeii; the green poisoned us with its arsenic; we groped in the darkness of the

maroon; moths corrupted them, and we all breathed freer when they were scraped off our walls and flung away. Then it was that the housekeeper rejoiced in a blue room, a crimson room, a red room, the paper giving the key note, and everything else, even to the soap in the soap-dish, following after. But we have changed all that, all tastes can now be suited excepting bad taste. You can, if you choose, paper your room in pale olive-green tints with a sunflower in the corner, a frieze of peacock feathers, an Easter lily preaching æsthetics from its pulpit of the book-case, with a brass warming-pan suspended over the mantel, and the sofa-cushion turned lining-up, because its silk and flowers do not "compose" well, or you can choose flowers galore, and vines rich as the grape, or delicate as the cypress or the passion vine. You can have your paper embossed in pale cream tints with golden star or flower, with frieze of delicate tea roses; or you can have, on dull gold ground, damask and blush, and cloth-of-gold in all their vivid splendor. If you are cultivated to that artistic point that you "do not wish nature in art" then you can select from all conventional forms. Or if you are still in the barbarism of nature, you can have flowers that seem to breathe perfume, and leaves that the wind seems to lift. And just here comes in that great battle, fought through all time, between the supporters of the conventional and the advocates for the natural. "Decorative art must not be pictorial," cries one side, and "Why not, forsooth?" answers the other, and proceeds to draw up its line of battle, headed by the greatest wall-and-ceiling decorators the world has known. Here is the battle-cry, the proclamation of the conventionalizers, and it is a good and strong one, entirely convincing till you hear the other side. I take the statement of their principles from a little book published in London, called "How to Decorate." Most people know that there are two very distinct manners of painting; these are usually called decorative and natural. Natural art refers to that manner of painting when the artist takes everything direct from nature; he tries to copy what he sees as correctly as he can, and calls in the aid of perspective, foreshortening and ærial effects, and especially he strongly accentuates light and shadow. This is, in fact, the sort of painting usually seen in pictures, in which each object stands not against a mural back-ground, but detatched and apart, with the air all around it, the picture represents a series of planes converging and vanishing toward the horizon. This is obviously unsuited to mural decoration, in which objects are represented on one plane.

Decorative art allows every scope for beauty of form and of color, but dispenses with ærial effects, and to a great degree with shadows. The wall behind the painting is understood to be there; there is no attempt at deception in any way. The outlines are all most carefully drawn, and are accentuated by a decided line of color of some warm, dark tint all around each object. Chiaroscuro would be as much out of place as perspective, carried to any marked point; though in all drawing, however flat, a knowledge of the laws of perspective must be useful. Flowers (of course single ones are infinitely preferable) should be drawn with great attention to structural form, but should be treated in a conventional manner, *i. e.*, with a certain amount of stiffness and regularity, not rambling about as the plant from which they are copied may have elected to do. In short, decorative art, though it refers to nature, does not copy exactly all that it finds there, but selects what is best adapted to its purpose. This regularity, with the absence of strong lights and shadows, and with the few colors employed (at least at one time), may seem calculated to render art that is severely decorative also somewhat monotonous and uninteresting, but this will not be found to be the case in practice. Variety is not always charming, it is quite capable of jarring. No one would admire a sentence supposed to be English, but interlarded with French and Italian, and with, perhaps, a word or two of German thrown in. There is a repose, very grateful to the nerves in this conventional art, and in these few subtly contrasted colors, and restful quiet in art is a very high quality and is especially needed and prized in these days of bustle and scurry.

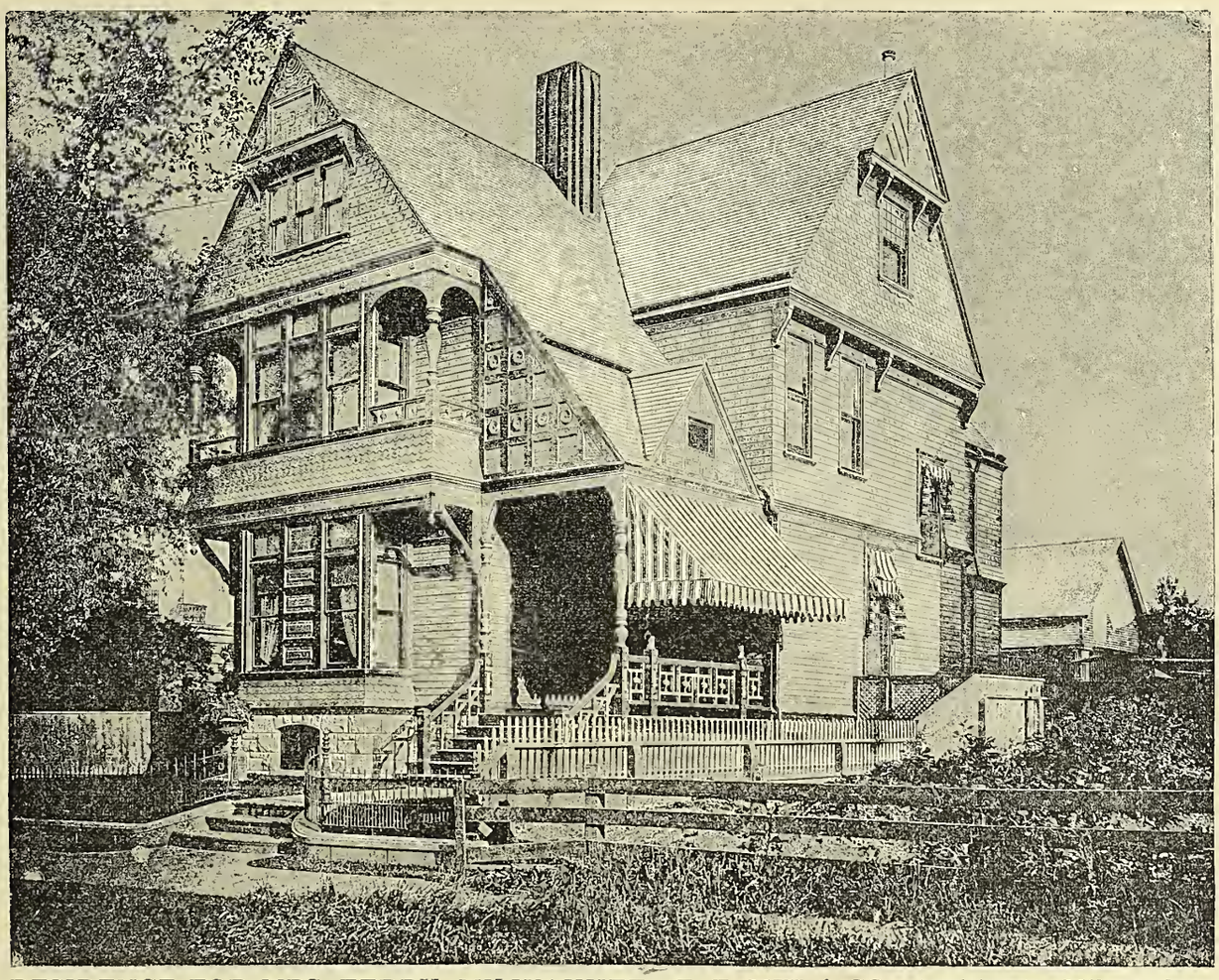
One hears a great deal about "flatness" in decorative art, but that does not mean distortion; the absence of strong light and shadow, and of perspective, and the broad edging lines, will make objects flat enough without squared-out drawing. It will be seen that though in some respects decorative art may seem simpler than natural art, it yet demands most careful and correct draughtsmanship, there being no vapors or dark shadows to hide careless drawing; any mistakes are distinctly visible. It will be admitted also to be much more suited to wall decoration than its sister art. There need be no rivalry between the two, their aims are so very distinct; there is also no reason for despising decorative art, or looking on it as merely a handicraft. It may not hold out the great prizes to its students that pictorial art is able to do; it has no galleries or academies in these days, but many a city in Italy can show its greatness, and its antiquity is beyond dispute. The thoughts and lives of men, and the histories of the world have been written in decorative-art characters from the earliest ages; this has been the unspoken tongue of every nation, conveying ideas, as it does, from the eye to the mind; as a child understands pictures before he understands spoken words.

Decorative art is no child's play, invented in these latter days to beguile a few weary "æsthetes;" it is incorporated with, and it has given outward form to some of the greatest events in the world's history; it shows how from all ages the love of beauty has struggled to express itself, and the very art itself, in some countries—in Egypt, for instance—was a religion. All may worship at this temple now, though all cannot be priests; but on each one who approaches art reverently, knowing her to be something more than the amusement of a few idle hours, she will freely bestow delights that never weary, showing subtlest forms of beauty in unexpected places, giving to her followers eyes to see and hearts to understand.

Thus far the proclamation of the army of conventionalism: but the hosts of the opposing army, the army of nature, form their line of battle and charge with overwhelming power. All art, they say, is one, and all art is decorative art. You call a wall without decoration a "dead wall," but frame a picture and hang it thereon, and it ceases to be a dead wall through the life of the decoration placed there, the picture becomes a wall decoration. The simplest tinting strikes the key note of wall and ceiling decoration, and from that we pass up through the richness of oil colors, the iris tints of glass, the prettiness and comfort of paper hangings, the shine of tile, the shimmer of silk, the sheen of satin, the glow of velvet, the magnificence of stamped and gilded leather, the gorgeousness of cloth-of-gold, the glitter of silver tissue, the splendor of polished marble, and the wonders of Persian, Arabic and Turkish design, up to the last and final note in this grand gamut, to the work of those great masters, who used all their cunning of eye and hand, all their skill and knowledge, all the inspiration of their genius, to beautify the walls and ceilings of churches, palaces and homes, and who have left these mural decorations, these glorious pictures, these divine and immortal works for the wonder and admiration of all centuries to come. Not one great decorator has ever conventionalized. They have all followed nature as humble disciples and imitators. If we look at the grand age of mural decoration we shall find that pictorial treatment was the rule. The three supreme wall decorators were the Greek Phidias, who sculptured the frieze of the Parthenon; Michael Angelo, who awed the world with his "Last Judgment," and Raphael, whose "Transfiguration" is considered the greatest picture of the world. Michael Angelo was called a giant, Raphael an angel, and Phidias a god. This is the range of wall and ceiling decoration, from the brush of the calsominer to the chisel of a god, in purpose a unit, in variety of treatment infinite. Beside the immortal three, there are other grand leaders to marshal the hosts of the opposing army. A crowd of brilliant men, most of them wall-decorators, gathered around Cosmo de Medici, the two Lippi were there, and the two Piselli, there were Massaccio, Binozzo and Ghirlandajo. All Florence caught the spirit of the Medici and the genius of Donatello, Brunelleschi and Ghiberti lighted Italy and shone throughout the world. Giotto's frescoes decorated the walls of the Campo Santo, and Leonardo de Vinci painted his masterpiece, the "Last Supper," on the walls of the convent of Santa Marie delle Grazie, at Milan. Perrigino frescoed the Vatican for Pope Sextus V. and all these pictorial wall-decorations are left for our admiration and imitation. Do they not teach us to do our best? If it be conventionalized work, then let us conventionalize, but if the artist power be upon us then let us use it in that higher work of which the great masters have set us the example. It takes taste and feeling to put into a ceiling the flush of sunset, or the gray distance of twilight with the stars gleaming through; but let not the man who can do only this, sneer at the master who can make that ceiling an open gate of heaven, through which we see the ranks of angels and the great white throne.

There was a time when we found Moorish rooms in a Moorish house, and Persian rooms in a Persian house, and Gothic rooms in a Gothic house, and Queen Anne and colonial rooms in Queen Anne and colonial houses, and classic rooms in Greek houses, but now that our houses unite all styles of architecture, to go through them is like a journey 'round the world. We step from Japan to the Alhambra, from Persia to Egypt, from Queen Anne to the first empire, and rush all the way down the centuries as we go from our vestibule to our dining room. It is amusing, this living in museums, and we can only say again, *Chacun a son goût.*

There are many men in Chicago far richer than were the Medici, either Cosmo or Lorenzo, and yet Cosmo de Medici formed Italian taste, and Lorenzo (called "The Magnificent") made Florence the art school of the world. Why not some Lorenzo the Magnificent here, who will be great enough to use his money for great purposes, and make Chicago famous by using his "rascal counters" for noble ends; to encourage artists, to bring into the city's coarseness the beauty and refinement of a great school of decoration?



RESIDENCE FOR MRS. TERRY, MILWAUKEE.—E. T. MIX & CO., Architects, Milwaukee.



RESIDENCE FOR CHAS. L. COLBY, MILWAUKEE.—M. A. ROBERTS, Architect.

Genius in Architecture.

PAPER No. II.

BY JOHN CLIFFORD, ARCHITECT.

THERE are few things in the history of architecture more strikingly suggestive of its scope and capabilities than the sentiments of veneration which animate its votaries, for no other art cherishes such memories and keeps embalmed so many glorious traditions. No force of habit dulls the charm that hovers round those architectural monuments bearing record of the genius of centuries, as if the glow of beauty which pervades their details became the transparent raiment in which their architects imprisoned and transfused their thoughts. There is a sacredness and inspiration about them in which the feelings and achievements of generations are faithfully reflected. The dexterity of the hand, the grace and symmetry of the consummate artist are ever present in their graceful outlines. There is a charm and sorcery in the chaste austerity of their composition, which clearly indicates that they would be labor without inspiration, mechanism without artistic merit, unless the soul of art found an abiding place in the fervid imaginations of their architects. For such great triumphs art owes the debt of centuries. A rough stone touched by the hand of genius, and the wars of Homer are fought before one's eyes, while life and death, and man's sighs and sorrows, commingling with the roar of battle, are vividly transferred from time to space. With the true artist, conception is always immeasurably superior to the power of execution—the visible forms in which he clothes his ideas are always subordinate to the inspiring impulse. His knowledge of art should be as expansive as the heavens, as illimitable as eternity in its comprehensiveness. From the vagaries of the dethroned reason to the unalloyed pleasures of the lofty mind, from the ambition of the conquerer to the clumsy glee of the clown, from the highest altitude of human triumph to the depths of human despair —the true artist should comprehend all with a temperament strongly impregnated with the spirit of his age. It is in great conceptions like this, that life is imparted to the cold marble, and that the sentiments of humanity are made oracular in stone. Inspiration must underlie all great architectural efforts, as the skeleton underlies the beauty of the human form. Art, if anything, should be the perpetual uplifting of the beautiful in the sight of the multitude—the adoration of that chastity and symmetry, both moral and material, which are invariably ignored in the conflicts and stormy contentions of life. Those who truly love art care little for fame, but pursue their course with a fervor and buoyancy of spirit that commands the destiny they crave. Architecture is protean, sorcerer and slave, sovereign and servant at the same time. It was only when art was animated by higher vision and nobler grasp that it supplanted the idolatry of nature. Solomon's love of gold lent its color to the visions of the recluse of Patmos, as the vulgar instincts of a horde of predatory adventurers, lent their hue to the imaginary figments of the Apocalypse. The web and woof of the looms of Syria, the Tyrian purple, the gems of Persia, the spoils of Babylon, tinged the vision of the early Christians, who enclosed the symbol of the Deity in gilded tabernacles, in the belief that they themselves in the distant future would enjoy eternal life in mansions blazing with precious stones. These sentiments tainted all arts and religions for centuries. They vulgarized the Transfiguration, corrupted life, debased every phase of manhood, from the hero to the street vender, imparted the colors of the rainbow to the wings of cherubims, and clothed with tinsel the messenger of life and death. This unpardonable vulgarism can be logically traced to the misapplication of the principles of art, and pervades every epoch of the dawn of Christianity. It had no idea of the fitness of things, and, worst of all, it had no conception of nature. Art ought to be incapable of such degradation, and should never be compelled to sin against the laws of symmetry and beauty, which gave it form. Men called it tawdriness, who could not see that it was something worse, until the vigor and opulence of the Renaissance imparted to it a splendor and versatility of position that restored the living principle by which the aspirations of the intellect were exalted.

No one who has reviewed the stormy passions of an ardent and imaginative manhood can fail to combine with a reverence for the past a perception of the beauty of edifices which bear the most glowing attestation to the supremacy of Italian genius. What matters it that Bramante, Buonarotti and Brunaleschi toiled to attain the highest degree of excellence in art while surmounting the summit of human infirmities, their names will only perish with the extinction of historic record. What matters it that Serlio perished in the massacre of St. Bartholomew, or died upon a peaceful bed, for his Hotel de Ville, in Paris, was the most indisputable auxiliary to his renown. The great Ghiberti was nurtured in an atmosphere impregnated with the beauty and majesty of art. He it was who revived the true artistic spirit that breathed a veneration for antiquity, and which, up to his time, had been stifled and extinguished under the first principles of Christian bigotry and intolerance. Fidelity to nature was his inspiring principle, for the only aim of art is to follow nature. Negation can no more be the parent of heroism than egotism can be the inspiration of art. To realize the highest standard of taste, architecture should be pure, majestic and solemn in its completeness, without a line to mar the consummate harmony which the perfect master can only impart to it. Here, if anywhere in our city, which has passed through its baptism of fire, will the soul of the born architect awaken to this fact. Those who are imbued with the true spirit of this incomparable art are as few in number as those capable of noble sacrifice or the accomplishment of a grand or heroic deed. To those only who are so beneficently endowed belongs the ineffable grace and charm that cannot be counterfeited, where hope in the regeneration of art and the freshness of unbroken illusion have passed away.

Art now seems to have no loftier aim than the common vanity of the subjugation of the senses and the subordination of the noblest faculties in their indulgence. Where the intellect has exhausted itself in base petty commerce, it has no abiding love of the beautiful in any form. A high appreciation of art naturally springs out of the labyrinths of a great nature. Never more incongruously than at the present time, are mediocrity and poverty of imagination so curiously blended. Our people array themselves with obstinate persistency against anything savoring of genius, enemies to taste and talent, never rising to a loftier sense of duty than lays in a tacit obedience to established usage. The modern fancy of making art respond to every human mood is morbid, exaggerated and destitute of every idea of refinement, and those who pander to this vulgar sentiment by resorting to glare and glitter for architectural embellishment grossly outrage a profession of which they have no higher conception than to appropriate symbols which embody the corruption and profligacy of our times.

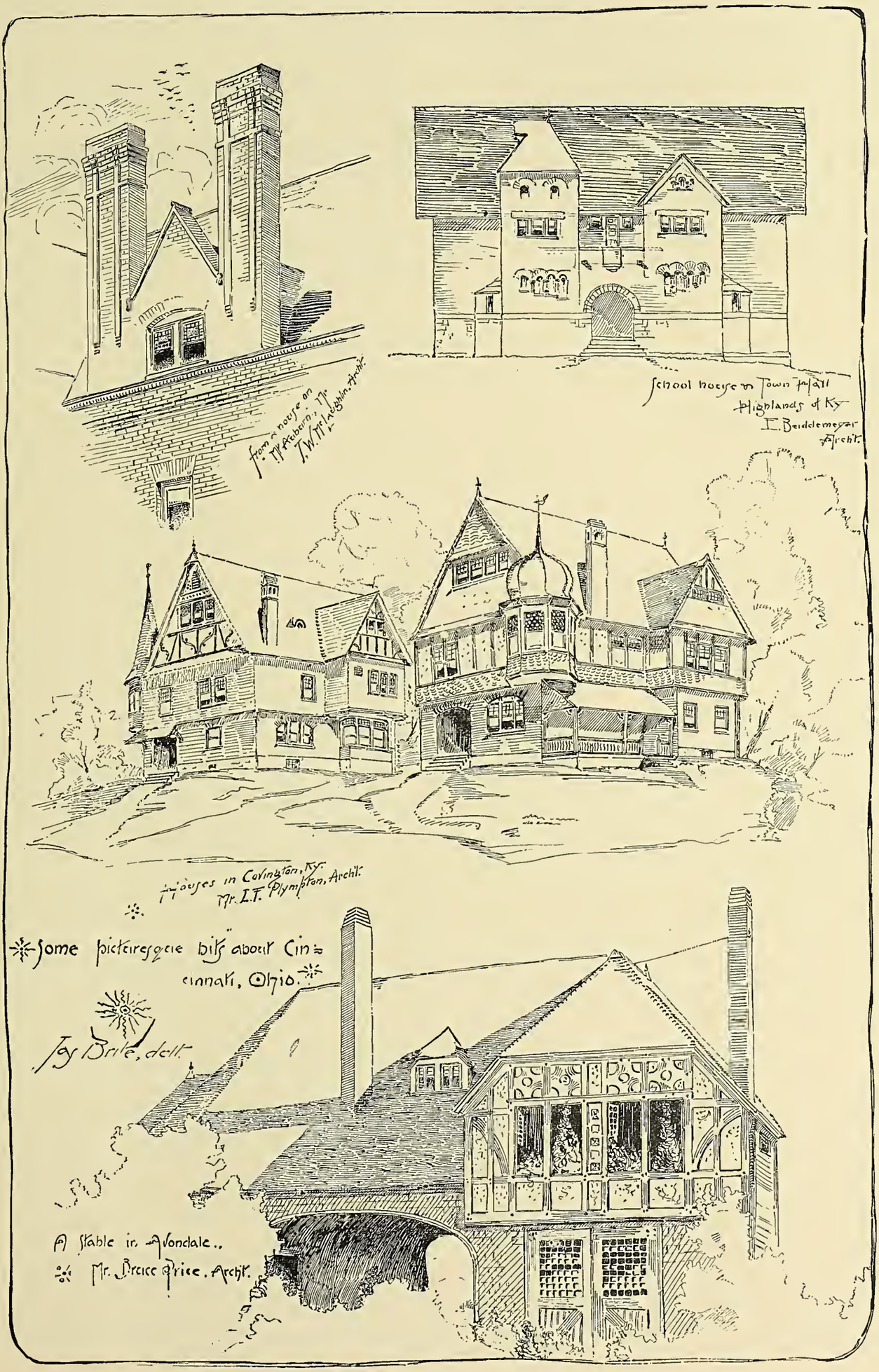
Women in Architecture.

LULU STOUGHTON BEEM.

THE laws of nature limit the sphere of women's labor, and, as if to circumscribe them still farther, society has heretofore joined its forces. The age is progressive, not only in its arts and sciences, but in all social questions, so that few are content that things should remain as they are, simply because they are. Practical workers and thinkers have done much in the past two decades to release women from the thraldom of society, and yet make no conflict with the laws of nature. So we see women now admitted in the higher professions; also engaged as reporters, bookkeepers, correspondents and other vocations which were thought impracticable for them only a short time since. And architecture offers another field wherein it is believed they can successfully compete with men, and where meritorious work will be properly compensated.

Why women have not taken to this vocation long ago has always been a mystery, and explainable only on the theory that the human mind in all inventions and discoveries works from the complex down to the simple—while some of the "strong-minded" of the sex have been trying to knock down the state barriers, and almost upheave the very foundations of society for the ostensible purpose of enlarging woman's sphere of labor and giving her a better chance in life to fight the great battle for bread, yet none of these advocates seem to have suggested this as a possible pursuit. And why not? That their natural tastes and abilities incline them toward all that pertains to household matters cannot admit of a doubt. They are the heirs of their ancestors; and "keeping house" begins in infancy and continues with them through life; but history has yet to record an instance of a boy abandoning his whip, top, guns or bats for anything of such a domestic character.

It may be urged that they are not competent because they cannot direct the work of superintending, and that they should be practical builders. Napoleon, in excusing his poor dancing, said: "Madam, I know I do not dance well—that is not my business; my business is to make other people dance." Isn't it possible that women may develop talent for making other people effectually superintend the work they plan, or that they may become just as able to learn the comparative value and merit of materials as men? Beside, architecture, like every other profession, has its branches. The requirements of modern society make it utterly impossible to find one in the law, medicine or mathematics, or even the various trades, equally competent in all branches. A lawyer may be a good pleader, yet a poor advocate; a doctor may be a good physician, yet a poor surgeon—be poor at rheumatism, and yet death on "fits"—but is this limited capacity to be urged against their entering at all in these professions? Louis C. Tiffany has made himself famous and wealthy in architecture and interior decoration, the latter just suited to the "finer fancy and gentler thought" of women, and no one stops to ask if he be a practical builder or successful superintendent. Women are naturally better judges of color, better in the blending of fabrics, beside knowing intuitively what is wanted about a house—wants too small for men to perceive or pen to describe, yet so necessary to make it complete. Mrs. L. M. Wheeler and Miss Clark,


From a house on Tr. Atchison, Tr. W. McLaughlin, Archt.
School house in Town in all Highlands of Ky
E. Beidelmeyer Archt.
Two houses in Covington, Ky.
Mr. L.T. Plympton, Archt.
Some picturesque bits about Cincinnati, Ohio.
Jay Brite, delt.
A Stable in Avondale.
Mr. Bruce Price, Archt.

of the New York Decorative Society, took the first and second prizes for wall-paper this year, although many men had entered the lists against them, which is a straw, indicative of their possible development in one of the branches of architecture. Certain it is that women would know enough not to build basements so low that girls cannot be hired to work in them; or have stationary washtubs so far away from windows that it is impossible to see when clothes are clean; they would know enough to have plenty of and convenient closets and storerooms, and have the principal ones well ventilated, with sufficient light. These shortcomings show that men are fallible, and it comes in bad grace for any of them to question the competency of women as architects before they ever had a trial.

The pride of true womanhood precludes her asking aught on the ground of gallantry; all she seeks is an equal chance in this walk to try her talents, and let the result speak for her. But do not discourage her at the very threshold. Her admission into this profession involves no change of social or statutory law; the calling being high and honorable and in consonance with her natural tastes and predilections, it cannot degrade her, yet giving her a chance to earn a better livelihood and thus becoming happier thereby.

Our Illustrations.

Page 41. Fragments of Cincinnati Architecture. Sketched by J. Brite.

Page 39. Residence for Chas. L. Colby, Milwaukee, by M. A. Roberts, architect, Newark, N. J., from photograph by J. W. Taylor, Chicago.

Page 45. Frame residence, by Geo. S. Spohr, architect. It is frame and has some advantages in interior arrangement that are noticeable. It is designed to cost about $4,000.

Page 39. Residence for Mrs. Terry, E. Townsend Mix, architect, Milwaukee. From a photograph by J. W. Taylor, Chicago. The cottage is classed as modern Queen Anne, frame, cedar shingle roof, gables, etc., built on rock-faced limestone foundations. It is 36 by 60 feet, two-and-one-half stories and basement in height, contains eight rooms, bath-room, closets, etc., and is finished in hardwood, the reception hall and stairs being in quarter sawed red-oak. The cost of building and improvements is about $7,500.

Page 45. Residence for Prof. Joseph Cummings, President of the Northwestern University at Evanston, by W. L. Carroll, architect, Chicago. The building is situated directly opposite the entrance to the college campus. It is frame, 40 by 50 feet, two stories high, Eastlake in style, with corner tower treated as a roof fixture in a unique manner. The design of the front has in view, particularly, effective play of light and shade by recessed balcony, accented lines of wall construction, varied roof lines, etc., rather than by projection of cornice, the effect being to give both vigor and repose to the edifice. It is finished in hard-woods, and will cost about $7,000.

Supplement. Office building for John D. Parker, by John M. Van Osdel & Co., architects. It is situated fifty feet south of Jackson street and directly opposite the new board of trade building, is constructed of Vert Island red sandstone and red pressed brick, giving a front that is at once substantial and pleasing. The entrances are on a level with the street, and two Hale elevators give access to the floors above. It is heated by steam by direct radiation. Each office is well lighted and ventilated, supplied with fire-proof vaults, mantels and grates, mercurial fire alarms, and the walls, ceilings, etc., are fire proofed with hollow fire-clay tile, and the partitions, being also of this material, are easily moved to accommodate the wants of tenants. The floors and wainscoting of first floor halls are of tile and marble, and the building is finished in red oak. Great care has been taken in the plumbing, ventilating and sanitary arrangements, the effort being to make this a first-class building in every respect. It is nearly completed, and will cost $125,000.

Also office building for Henry Memery, by John M. Van Osdel & Co., architects. This structure is situated on the corner of VanBuren street and Pacific avenue. It is 31 by 100 feet. It will be seven stories in height, and built of pressed brick upon a foundation of Wyoming valley blue stone—a very decided blue and a new stone in Chicago building. It will be heated by steam, equipped with Crane's hydraulic elevators, and fitted as a convenient office building. It will cost, when completed, about $75,000.

Pennsylvania Green Stone.

One of the most attractive stones used in building is known as Pennsylvania green stone, and its beauty, when used by architects who can properly cause it to harmonize with other materials, surroundings and in design, has made it sought for throughout the country. It was first probably used by the country people in the neighborhood of Chester county, Pa., before the Revolution, as it was easily accessible, but at that period and until the past few years for its utility alone. The old church into which the wounded La Fayette was carried, after the battle of Brandywine, is built of it, and many other buildings in the vicinity. The quarry is upon the farm of J. H. Brinton, Thornbury, P.O., and has been owned by the family for seven generations, and not until an architect in Baltimore saw its beauty and used it, did the outside world recognize its value. It covers about 80 acres, and is the only deposit of this kind in the world. It is shaped like a cone, a center of granite being surrounded with this green stone, as though forced up from the center by the granite. Its color is chromic oxide or chrome iron, is unstratified, breaks in wedge-shaped masses. Its value for architectural purposes has been illustrated in Chicago by a leading architect, one of whose best creations is a residence built mainly from this material.

Architectural and Building Notes.

The School of Architecture in Paris has lately admitted Miss Laura White, an American girl, and a sister of Hon. J. D. White, of Kentucky.

The Ellithorpe Air Brake Co. of Chicago will furnish twenty elevators, ten hydraulic and ten steam, to the World's Industrial Exposition at New Orleans.

Col. Powell is introducing a new but popular roofing material called marmorlite. It is made by the Marmorlite Roofing Company of Chicago, of of which Col. Powell is president and Mr. E. W. Martin is the general manager.

A curious fact in regard to the making of cast iron columns is noticed in the iron-work made for the Home Insurance building. An allowance is usually made for contraction of the iron from the pattern measure, but here the iron swelled, and this not being discovered until the lintels were made, they were found in some cases as much as three-fourths of an inch too long, and had to be cut.

The following notice has been received from the secretary of the National Plumbers' Association.

Notice — There will be a meeting of the Executive Committee of the National Association of Master Plumbers of the United States, held in St. Louis October 15, 1884. As this meeting will be a very important one, it is necessary that all members of the Committee should be present.

A. Young, President.
J. J. Wade, Secretary.

The Western Association of Engineers decided to alter the rules of admission so that an architect, the graduate of a mechanical school, or any scientific man would be eligible to membership. The initiation fee and the annual tax were made $10 each. Graduates of the Chicago Manual Training School were voted honorary members of the association. In the future the society will meet monthly instead of fortnightly.

An immense throng gathered at Millersburg, Ohio, on the 18th ult. to witness the laying of the corner-stone of the new Court House of Holmes county (J. W. Yost architect), Gov. Hoadley and Judge Welker being the speakers for the occasion. A very interesting feature of the occasion was the fact that the iron lever used in raising the stone was used for the same purpose when the corner-stone of the old Court House at Newark, Ohio, was laid, over fifty years ago.

Architects Burnham and Root have prepared plans for a seven story office building for the Traders Loan and Trust Company. It is located on Pacific avenue, south of the Grand Pacific, opposite the Board of Trade building. It is 80 by 90 feet, and will be built with first story of buff Bedford stone, the remainde of Anderson pressed brick. The foundations are isolated piers, and have the peculiarity of part being of dimension stone and part of common brick set in cement.

In an interview Commissioner Cregier expressed himself as being very much dissatisfied with the carpenter work in the new City Hall. The work, while being of a substantial character, did not fill the requirements of the specifications, and, in consequence, the carpenter has taken down the work and is rebuilding as fast as it can be done. The contractor, Mr. Foster, says he will stand by his contract and will build according to specifications, and it is probable that no more trouble will be experienced.

Among the new buildings which are to be fireproofed with the hollow fire-clay tile, which have made the system of fire-proofing, placed by the Pioneer Fireproof Construction Company, popular, may be mentioned the mammoth Chicago Opera House and office building, the Dane county court-house, at Madison, Wis., the Manhaska county court-house, at Oskaloosa, Iowa, the Masonic library building at Cedar Rapids, Iowa, and a fireproof vault in the suburbs for Mr. Zimmerman. The immense fireproofing contract, the largest one ever let in the West, that of the Sibley warehouse, has been completed very satisfactorily to the owner by this company.

Architect Normand S. Patton has been appointed architect and has drawn plans for the library building for the Scoville Institute, at Oak Park. It will be built of Lyons limestone, a hard, flinty, fossiliferous, light-colored stone, quarried in the neighborhood of Chicago. The trimmings will be of buff Bedford stone. The design shows an attractive exterior and a well-planned interior. The structure will be fire-proofed, with iron girders, etc., and the interior will be finished in red oak. It will cost about $60,000. Architect Patton is also building for Joseph Barbier a three-story flat building on the corner of Center avenue and Macalister place. It is divided into five flats, covers 100 by 61 feet, will be built of Indiana pressed brick, trimmed with Bedford stone, and will cost about $30,000.

The recent lumber fires in Cleveland have not only destroyed millions upon millions of feet of lumber, but have had a disastrous effect upon other matters, noticeable among which is the building enterprise promoted by Mr. John L. Woods, of the firm of Woods, Perry & Co. Some months ago Mr. Woods notified the medical department of the Western Reserve University that he would build for them a fine college building at the corner of Erie and St. Clair streets, which was to have been commenced by this time, but for the great loss sustained by the firm, of which Mr. Woods is the senior member. In the following letter we are given to understand that the matter is now to be laid aside for the present. It is to be hoped, however, that the interference will only delay, and not cause the enterprise to be entirely abandoned.

Cleveland, O., Sept. 15, 1884.

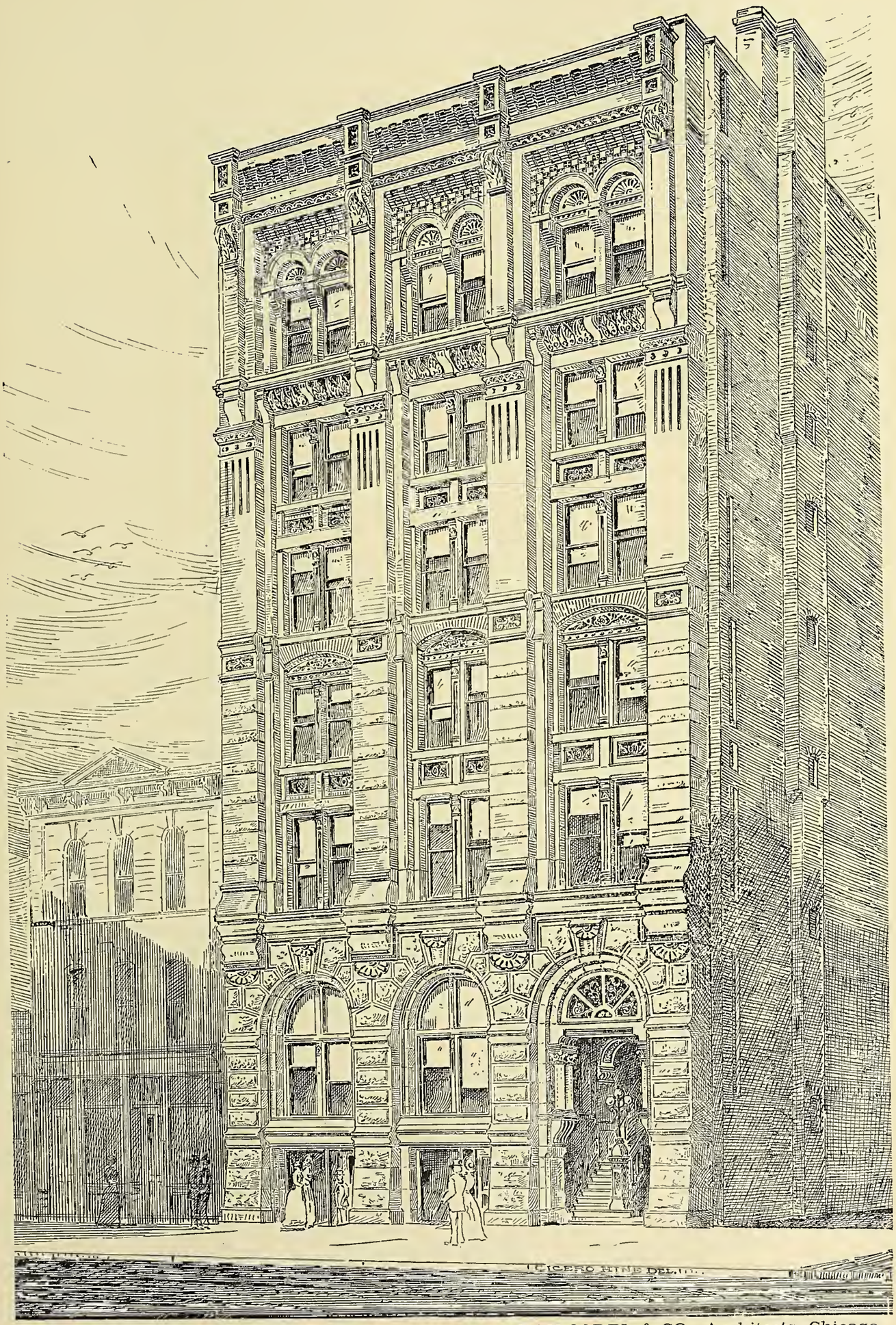
Dr. C. E. Webber:
Dean Medical Department of Western Reserve University.

Dear Sir: I am instructed by Mr. John L. Woods to inform you that he will temporarily suspend the construction of the college building undertaken by him for your institution. He finds this necessary because his funds provided and immediately available for that purpose are required to repair the heavy losses sustained by his lumber firm in the late fire. He hopes, however, to go on with the building at an early day. You need in any event, to be under no apprehensions as to the ultimate completion of the undertaking, as full provision to the end has been made against every probable contingency. Mr. Woods deeply regrets the delay in the enterprise, and gives this notice solely because it may affect the immediate plans of your institution. Yours very sincerely,

J. M. Adams.



OFFICE BUILDING FOR HENRY MEMERY.—J. M. VAN OSDEL & CO., Architects, Chicago.



OFFICE BUILDING FOR JOHN D. PARKER.—J. M. VAN OSDEL & CO., Architects, Chicago.

From the Des Moines Association.

Des Moines, Ia., October 2, 1884.

To the Editors of the Inland Architect:

Dear Sirs,—There being no necessity for further publication of circulars Nos. 5 and 6, as all has been accomplished that was intended by these numbers, and as no further ones of that sort were ever intended, we hereby ask you not to trouble to publish the same unless you see fit to do so.

The subject of competitions, however, has not been discussed sufficiently to settle it satisfactorily, and we intend to take it up where left before this digression, and hope to be able to show what we are driving at and see the question carried through one way or the other.

Very respectfully,

E. H. Taylor, Secretary;
J. S. Blake, President;
Architectural Association of Des Moines.

The Chicago Exposition.

The Inter-State Exposition of 1884 at Chicago is only remarkable in its similarity to most of those that have gone before it. Instead of reaching out and gathering manufactures and products from the whole West, it is mainly confined to the display of local firms. In this it is as usual eminently successful, the exhibit being both instructive and valuable, and mainly placed by representative firms. The art gallery is, if anything, an improvement upon that of last year, and is very creditable, showing earnest work and judicious management on the part of the directors. One room alone is open to criticism, there being too many square yards of green, illustrating kitchen gardens and hay fields, while a nude picture called "thé rose," which in its false color, false anatomy and false expression "does not," as a newspaper critic remarked, "make even a respectable corpse," should never have been admitted, as it outrages the sense, taste and art instincts of every observer, and has spoiled the enjoyment of the whole gallery for many. On the whole the directors have done well to perpetuate this exposition year after year, and it is hoped that it will continue to exercise its influence so that some such event may each fall be organized to give our too hard working people a holiday that is both pleasant and instructive.

One of the most remarkable sights is the elevator shaft erected in the south end of the building by the Crane Bros. Manufacturing Company. This is constructed of tubular iron bolted together at the joints and lightly but strongly braced, making a perfectly strong and rigid shaft. The elevator, one of Crane Bros. best steam elevators, runs smoothly up and down this 150-foot shaft, the exhibit showing in the most complete manner the elevator and the tubular iron departments of Crane Bros. of Chicago.

Those who are content with imitations will find a most successful as well as attractive imitation of stained glass in the exhibit of the Decorative Glass Manufacturing Company of New York and Chicago. It is effected by lines in cement imitating lead joints and the painting of the intermediate spaces in mineral colors. The effect is beautiful, and at first glance one is disposed to believe it the real thing, bearing much the same relation as Alaska stones to real diamonds. It is worthy of examination.

American plate glass is placed on exhibition by Geo. F. Kimball, who is agent for the Crystal Plate Glass Company. The display is comprehensive in its variety, but a better exhibit can be found in Mr. Kimball's establishment or in any of the immense store windows furnished by him.

As indicative of the advance made in heating and ventilating apparatus during the past few years the best manufactories in the country have complete exhibits of their goods. The "pure air" furnace, made by the Hess Stove Works, as well as their stoves, bake-ovens, open fireplaces, etc., are well represented. The Richardson & Boynton Company exhibit their superb cooking range that has a universal household reputation as well as their beautiful "Latest," fireplace heater and grate; while in like extent and importance, with a multitude of friends to certify to their excellence, the stoves, ranges, furnaces, etc., of Warren, Fuller & Co. are displayed; the entire exhibit giving the householder the best the country, or the world in fact, can afford. Each has its intrinsic merit and each its quality of excellence.

Among the stoves, ranges and other heating apparatus exhibited by the Magee Furnace Company, the most noticable as well as most handsome is the "Kensington," parlor mantel and grate combined. It is finished in bronze or plain iron, and is an admirable example of stove foundry, with a utility that is creditable.

E. B. Moore & Co., of Chicago, give an admirable illustration of their methods of making wood carpeting or parqueting, an excellent covering for floors and made of permanent woods. J. Dunfee & Co. also display the same line of material, and examination should be made of their respective merits. They are both good.

In the gallery Scharnweber & Company exhibit a meritorious window ventilator, which takes air from under the window-sill in either a wood or brick house, and admits it to the room through small apertures covered with fine wire.

Mr. Julde Horvath, an architect, formerly of Buda-Pesth, Hungary, has opened works for the manufacture of majolica ornamentation at 374 Dayton street, Chicago. The samples shown are rich pieces of majolica painting upon terra-cotta. All the designs are raised, and are painted in mineral colors, burnt in, showing a resource for design and effect as endless as the subjects that can be handled. Architects are thus enabled to go outside of the designs furnished by tile manufacturers, and decorate mantels, wainscottings, walls, etc., in designs of their own choosing, and at less cost than the ordinary thing.

Mosaics.

The large skylight on the Royal Insurance building illustrated last month, was placed by J. C. McFarland & Co., Chicago.

A notable instance of the popularity of Hawley's improved method of house construction is illustrated by its adoption in the new normal and training school erected at the Sante Agency, indicating that his floor warming and ventilating system is becoming known throughout the country.

J. W. Reedy, the elevator firm whose losses by fire were noticed some months ago, has not only repaired the loss, but added considerable to his extensive works. They now cover 100 by 125 feet, four stories and basement in height, showing the rapid growth of the popular demand for the Reedy passenger and freight elevators.

The largest grain elevators of Chicago, as well as some of the largest throughout the country, have been built by one firm, that of J. T. Moulton & Son, of Chicago. This firm have just issued a neatly engraved card to their patrons, announcing the removal of their offices to their new fireproof building, No. 1545 South Clark street.

The firm of E. D. Morris & Co. are the successors to R. Roberts & Co., and are doing business at 216 E. Lake Street. Some of their work which has been placed in Herrick's hat store, on Madison Street, shows they are capable of reaching a high place among stained glass artists; their originality of design being one of the best features of their stained glass work.

One of the best materials for at once preserving and giving a perfectly flat, bright brick color to any kind of brick, is F. W. Devoes' flat brick red. It is, besides a permanent color and perfectly pure, quick drying, being impervious to rain in thirty minutes after its application. It is handled by the leading paint houses in the west, with headquarters at Coffin, Devoe & Co's, Chicago.

The extensive manufacturers of architectural and sheet metal work, Bakewell & Mullins, of Salem, Ohio., have recently made an extensive purchase, being all the machinery and the entire stock of dies, models, casts, ornaments and statuary, formerly owned by the zinc roofing and ornamental works of I. Atkinson, of Chicago. This addition gives to this firm facilities that rank them among the first in their line in this country.

The hospital building and also the arcade building now being completed at Kankakee by architects Willett & Pashley, have been furnished with hardware by Bullard, Gormully & Blackburn, who have also placed the handsome hardware in the Beaurivage flats under restoration by the same architects. These gentlemen have during the past year, their first as a business firm, won the respect and good will of leading architects by their knowledge of the hardware business, and thorough reliability in carrying out their contracts.

The season when the furnace, upon which will depend the comfort of the household through the winter, will be "tried as by fire" will soon arrive, and many will be found wanting. A comparatively new furnace, but one that has proved itself valuable during the past two winters, is called the Eclipse, and is made by the Jones & Erling Manufacturing Company, of Chicago. There seems to be a peculiarity in furnaces, in that the poorer the furnace and the less heat radiated, the more fuel they consume, and vice versa; and this being true the Eclipse is one of the best known. It is made in two styles, the "Twin" being a combination of two furnaces, and so arranged that not only can one furnace be run independent of the other, thus saving fuel in mild weather, but each can be fed separately in extreme cold weather, so that no decrease in heat is sustained. Double hot air pipes are always used by this company, and the setting of either their portable or brick set furnaces is always in charge of a capable and experienced furnace expert. The furnace has such exceptional qualities that it should be examined by architects and owners.

It is now an established fact that, as in many other lines in which the useful and the artistic blend, Chicago exhibits and supplies gas-fixtures in as large variety and as exquisite in design as can be found in the Eastern showrooms. This is because the largest Eastern houses have recognized the importance of Western trade, and have established agencies here, and it is now often proving the fact that the agency does a larger business than the principal house. The latest acquisition is the agency for the Archer & Pancoast Manufacturing Company, of New York. Through the courtesy of the Western manager, Mr. H. G. Willard, the handsomely fitted showrooms were inspected. They are five in number, and each exhibits a particular line of goods. In the first, separated by a doorway hung with heavy dark green curtains from the office, are found the plainer but neatly finished and tastefully designed goods for cottage and flat use. In the next are library and dining-room and hall lights, brackets, pendants, etc., designed in antique brass and oxydized silver. In the third, magnificent chandeliers, unique and beautiful in design, fit to decorate and light the drawing-room of a palace, some with more than twenty jets, display master workmanship in antique hammered brass, oxydized silver, and combinations of silver and hammered bronzes and copper. Here are also found some hall lights incomparable in design and exquisite in workmanship; while curious in effect, but worthy of inspection, are several designs worked out in wrought iron. In the fourth and fifth rooms, which like the rest are richly carpeted, decorated and separated by the heavy curtains, are different designs in newel and hall lights. One newel light designed in Mexican onyx and antique hammered brass is rich and attractive, as is also a central globe of the same stone, with its rich brass surroundings. A rustic vine for side of hall, worked in gold, with sprays ending in lights, is also unique, and in fact originality of design seems to be a rule here, for all are fresh and not found elsewhere, except as in Haverly's Theatre, where some of the best productions of this house have recently been placed. The antique in style seems to rule, and Persian lamps and candle lanterns are imitated for hall use. The visitor is impressed with the immense scope of the art of gas-fixture making, and wonders if the workers in brass and copper in mediæval times could "show a candle," to use a synonymous expression, to the gas-fixture maker of the present day.

The Lifetime of Building Stones.

ACCORDING to Mr. Alexis Julien, the lifetime of building stones is a very variable factor, and it behooves those who wish to erect a monument for posterity, to be prudent in the selection of the material, lest it should not last during the brief span of their own lives. Mr. Julien's figures of the durability of the various stones used for structural uses are as follows:

Sandstone (coarse), brown, will last	5–15 years.
Sandstone (fine, compact), will last	100–200 "
Sandstone (blue), will last	over 100 "
Sandstone (Nova Scotia), will last	50–200 "
Sandstone (Ohio), will last	over 100 "
Limestone (coarse, fossiliferous), will last	20–40 "
Limestone, fine oolitic (French), will last	30–40 "
Marble (coarse-grained, dolomitic), will last	40 "
Marble (fine-grained), will last	60–80 "
Marble (finer), will last	50–200 "
Granite will last	75–200 "

Lumber Notes.

THE French Lumber Co., of Chippewa Falls, lost a million and a half feet of lumber from their yard during the great flood.

ALABAMA has 32,000,000 acres of land, of which 20,000,000 are forests of yellow pine, black walnut, maple, hickory, ash, locust, etc., and seventy per cent of the mineral belt is covered by forests of long and short-leaved pine, black jack, oak and chestnut.

MORE than 100,000,000 feet of logs have been scattered over the bottom lands along the Chippewa river by the recent floods. The losses of lumbermen in escaped logs, and cost of securing logs and lumber, is estimated at $150,000. This, with the losses on residences, stores, mills, bridges, railroads and other public and individual property, will make the total losses something over $2,010,000.

A LARGE meeting of lumbermen held at East Saginaw, Mich., Sept. 20, resolved unanimously to ask the boom companies to suspend rafting logs for the balance of the season, and the mills of Saginaw river to shut down Oct. 1, or as soon thereafter as possible. If the boom companies suspend rafting, about all the mills will be compelled to shut down by Oct. 15, six weeks earlier than usual. Over-production and a dull market furnish the necessity for such action.

THE petrified forests near Holbrook, Ari., have been purchased by a company. They have commenced the shipment and the manufacture of the petrifications into tablets, tiles and various ornamental articles in building and finishing. The parties engaged in this work state that the petrified wood is rapidly driving California onyx from the market as a material for fine mantels, etc., as it is susceptible of a much finer polish and is also more permanent and lasting than that of the onyx. Several companies have already been formed for the purpose of getting possession of portions of the forest by pre-emption, etc.

A PLAN recently introduced into Belgium, says the *Lumber Trade Journal*, for preserving wood from decay produced by the atmosphere, water, etc., is to fill the pores of the wood with liquid gutta-percha, which is said to effectually preserve it from moisture and the action of the sun. The solid gutta-percha is liquefied by mixing it wtth paraffin in proportion of about two-thirds of gutta-percha to one-third of paraffin; the mixture is then subjected to the action of heat, and the gutta-percha becomes sufficiently liquid to be easily introduced into the pores of the wood. The gutta-percha liquefied by this process hardens in the pores of the wood as it becomes cold.

CONGRESSMAN STEPHENSON, of Marinette, Wis., states that the lumber manufacturers will pay no attention to the resolution discussed by the meeting of the Lumbermens' Association in Chicago a few weeks ago. They will run their mills until the river freezes up. There will be a surplus of about 150,000,000 feet of logs left in the booms at the close of the season. The amount manufactured during the season will not vary much from 350,000,000 feet. The amount of lumber cut in an average day by all the mills on the river, twenty in number, is 2,000,000 feet. The preparations for going into the woods this season are not being made on as large a scale as in some previous years.

SOME of our native woods cannot be equalled or be superseded by any foreign woods; in all our knowledge of natural history there has been found nothing possessing the excellent qualities of our native hickory. It is not, as commonly supposed, that good hickory must be grown in the north to be of the best; Its habitat extends from the Green mountains, in Vermont, following the coast range, the Alleghenies and the Blue Ridge through the Carolinas, and even to upper Florida. And, contrary to general supposition, the very best of the hickory used in the arts, where toughness is required, is obtained from North Carolina and eastern Tennessee. "It is wonderful what toughness the hickory timber of that mountain region is capable of," said a wheelmaker recently. "We can turn a piece completely around a circle without breaking a fiber."

Synopsis of Building News.

Akron, O.—Present condition of building business is somewhat depressed compared with the early part of the season. Outlook is favorable.

Architect Geo. W. Kramer reports the following work under his supervision from the office of Architect J. Snyder; some of the work is completed, but the majority is now under way. At Akron. For Diocesan Sabbath School, stone building, cost $35,000. For J. F. Sciberling Co., brick and stone office building, cost $50,000; business block, brick and stone, cost $7,000. For Henry Robinson, brick and stone residence, cost $20,000. For Dr. Theo. McEnright, frame residence, cost $7,000. M. E. Parsonage, brick and stone, cost $12,000. For James Viall, frame residence, cost $8,000. For Geo. Hanscomb, frame residence, cost $3,000. For Geo. C. Berry, frame residence, cost $5,000. For E. M. Merrill, a frame residence, cost $8,000. For Theo. Walters, frame residence, cost $6,000. For Geo. R. Hill, frame residence, cost $5,000. At Kent, O. For James Miller, residence, cost $8,000. For T. G. Parsons, frame residence, cost $7,000. At Canton, O. For Jackson & Hicks, frame building, cost $8,000. At Wadsworth, O. For Lutheran Society, brick and stone church building, cost $10,000. At Le Roy, N. Y. For M. E. Society, brick and stone church building, cost $25,000. At Massillon, O. For M. E. Society, brick and stone church building, cost $40,000. At Greenville, Pa. For M. E. Society, brick and stone church building, cost $20,000. At Augusta, Ga. For Presbyterian Society, brick and stone Memorial S. S. building, cost $45,000. At Elyria, O. Baptist Church, cost $25,000. At Oil City, Pa. Presbyterian church, cost $16,000. At Camden, N. J. M. E. church, stone, cost $50,000. At Windham, O. M. E. church, frame, cost $8,000. At Gambier, O. Diocesan Sunday School building, frame, cost $3,000. At Newcomerstown, O. Town Hall, brick and stone, cost $12,000. Besides the above, Mr. Kramer reports the following on his own account: At Akron. For Dr. Rockwell, frame dwelling, cost $6,000. For Chas. Traxbe, frame dwelling, cost $3,000. For Mr. Cook, frame residence, cost $3,500. At Ashland, O. For Hon. T. M. Beer, frame dwelling, cost $6,000. For A.O. Long, frame dwelling, cost $5,000. For Mr. D. Guth, frame dwelling, cost $5,000; also business block, cost $15 000, and frame church, cost $9.000. At Mt. Eaton, O. Brick residence, cost $8,000. At West Salem, O. For Mr. Britton, frame dwelling, cost $7,000. For Mr. D. Myers, a frame dwelling in Wayne county, cost $4,000.

Atlanta, Mich.—Architect W. L. Leach reports eight cottages at a cost of about $4,000 as the commencement of a new town; also two small schoolhouses; all frame buildings.

Bismarck, Dak.—A brewery is to be erected for Miller & Eckhardt, near the river landing, to consist of three large buildings, as follows: ice house, 43 by 118 feet, four stories high; brewhouse, 40 by 85 feet, three stories high; malt house and barley elevator, 50 by 118 feet, five stories high; all buildings to be of brick, and cost $60,000. The capacity of this brewery is to be 30,000 harrels per year. A dwelling house for the same parties, also near the river landing, has just been completed, size 30 by 61 feet, two stories high, of brick, to cost $5,000; architect, Fred. W. Wolf, of Chicago; superintendents, Heinze Bros.; contractors, R. B. Mason, Bismarck; Plettenberg & Renken, Jamestown and Mandan. A hotel, corner Sixth and Main streets, for Mellon Bros., size main building, 50 by 80 feet, kitchen, 26 by 32 feet, three stories and basement; pressed brick, iron trimmings; cost $30,000; Wirth & Kretz, architects and superintendents; Weaver Lumber Company, contractors. Brick block for L. N. Griffin, on Third street, near Main, has just been completed; size 25 by 90 feet, two stories high; pressed brick and galvanized iron trimmings; cost $15,000; Wirth & Kretz, architects; Mr. Megan, of Fargo, contractor. The Capitol building is nearing completion very fast; there are three crews of plasterers and carpenters at work, in order to get ready for the next Legislative assembly. The N. P. Refrigerator Co. have just completed a cold storage building of wood, with brick and stone foundations. Wirth & Kretz are now making plans for several dwelling houses, to be built next spring.

Bloomington, Ind.—Business somewhat slack; considerable work talked of for next spring.

Architect J. L. Nichols reports three one-story frame dwellings, aggregating $3,600.

Bourbon, Ind.—Architects A. Hartman & Son report: For Mr. M. Erwin, brick store building, 42 by 28 feet, slate roof, cost $6,000; projected. For E. Mendenhall, brick building, 28 by 28 feet, cost $3,500; projected. For Mr. H. Weaver, brick building, 38 by 28 feet, cost $6,000; projected. For Mr. A. Monesmith, brick building, 42 by 28 feet, cost $3,600; projected. Also schoolhouse, 36 by 31 feet, two-story brick, with slate roof, cost $2,000; projected.

Carroll, Iowa.—Present condition not very promising; outlook faie.

Architect S. P. Hart reports: For Valintine Hinricks, one-and-a-half story frame cottage, 30 by 32 feet, cost $2,500; completed; Hart Bros., builders. For Messrs. Trowbridge & Gilley, a two-story brick business block, 25 by 60 feet, metal roof, cost $4,000; completed; S. A. Davis builder. For Mr. Peter Berger, a two-story brick business block, 24 by 65 feet, metal roof, cost $4,500; under way; Jno. Löebel, builder. For Mr. Frank O'Brien, three-story frame hotel building, 30 by 50 feet, cost $3,000: projected. For Mr. J. M. Fox, at Sac City, Iowa, two-story brick business block, 44 by 80 feet, metal roof, cost $6,000; under way.

Cedar Rapids, Iowa.—All buildings now under way will be completed in about six weeks, and prospects are not flattering for new work this fall; outlook for next year is good.

Architects Smith and Faulkerson report: The Van Buren school building for the Independent School District; it is to be two stories and basement in height, 72 by 90 feet, built of brick, slate roof and tower, cost $18,500; under way; L. Wallace, builder. For Wm. Bryant, at Marion, Ia., two-story frame residence, 34 by 46 feet, cost $3,800; under way; Wm. Walters, builder. For Mrs. S. Brown, a two-story brick veneered Queen Anne residence, 45 by 60 feet, stone trimmings, cost $10,000; nearly finished. For Mr. M. A. Higley, Queen Anne frame residence, two stories high, 52 by 63 feet, cost $12,000; under way; J. M. Null, builder. For C. W. Eaton, two-story brick veneered residence, stone trimmings, 45 by 58 feet, cost $10,000; underway; A. H. Connor, builder. For R. M. Garrison, two-story frame residence, 35 by 46 feet, cost $3,500; under way; J. M. Null, builder. For H. Ferguson, two-story frame residence, 40 by 46 feet, cost $4,500; under way; L. Wallace, builder; St. Luke's Hospital, two stories and basement high, brick with stone trimmings, 42 by 78 feet, cost $10,000; nearly finished; L. Wallace, builder. For W. B. Mack, two-story brick veneered residence, 40 by 52 feet, cost $7,500; underway; L. Wallace, builder. For Craft's estate, two-story brick store building, 40 by 80 feet, cost $11,000; plans completed. The Farmers' Ins. Co.'s office building, three-story and basement, 40 by 80 feet, brick, with terra-cotta trimmings, basement of Connecticut and Lake Superior brown stone, cost $15,000; under way; L. Wallace, builder. For Wm. O'Hara, two-story frame residence, 40 by 52 feet, cost $5,000; under way; L. Wallace, builder. For O'Hara Bros., three-story brick store building, 60 by 100 feet, stone trimmings and terra-cotta cornice, cost $20,000; projected. For P. Cornell, at Vinton, Ia., two-story frame residence with tower, 32 by 40 feet, cost $4,000; under way. For Wm. Ure, two-story frame residence, 30 by 40 feet, cost $2,800; under way; J. M. Null, builder. For Lenct & Mitralsky, two-story brick stores, 40 by 60 feet, cost $5,000; under way; H. Beseler, builder. For A. T. Averill, two-story brick residence, 51 by 62 feet, cost $15,000; under way; Mark Hall, builder. For J. Jacobs, remodelling frame residence, 22 by 40 feet, cost $2,000; under way; L. Wallace, contractor.

Chicago, Ill.—The building season is not as brisk as it promised a month ago, the presidential campaign, whether correct or not, being charged as the reason for the falling off. The weather has been exceptionally fine, resembling that of the fall preceding the great fire, with the fortunate exception of a few showers which have kept the ground reasonably damp. This fair weather has enabled work to progress rapidly, and new work is coming into the architects' offices slowly, much figuring and little contracting being the rule. Common brick is $7.50 a thousand, and the demand good, the condition of the market being more settled than it has been for the past two months.

The records of the fire insurance patrol show an average of about seven calls a day and a large number, if not a majority of the causes to be from the oversetting or explosion of coal oil lamps.

The city fire department are steadily pushing the work of placing their wires underground, notwithstanding the fact that men well posted and familiar with all the systems of underground cables in use say that they prove failures upon the approach of frost; the lines so placed in England and Ireland in places where the frost is almost as severe as here, work perfectly the question of cost being the only reason for maintaining wires overhead. The cables are made similar to those laid here, some being encased in paraffine and canvas and others in solid pipes.

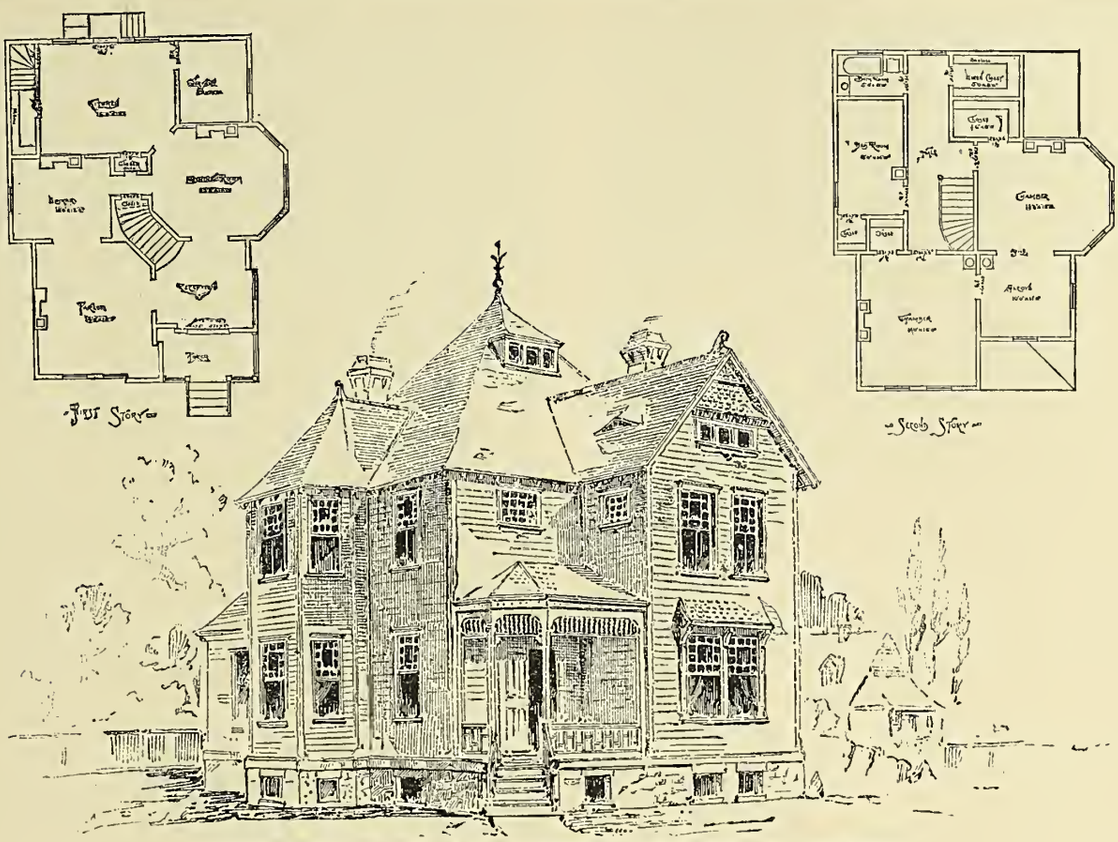
The great tower of the board of trade with its mass of iron work and scaffolding show active work on the part of the contractors while the interior is in the same state of rapid progress toward completion.

The great 9-story warehouse designed and erected by Architect Geo. H. Edbrooke, for Hiram Sibley & Co., is at last completed and occupied. It contains five of the largest elevators in the West and is a mass of iron and fire-proof material, the adaptability of hollowfire clay tile for warehouse construction being well illustrated.

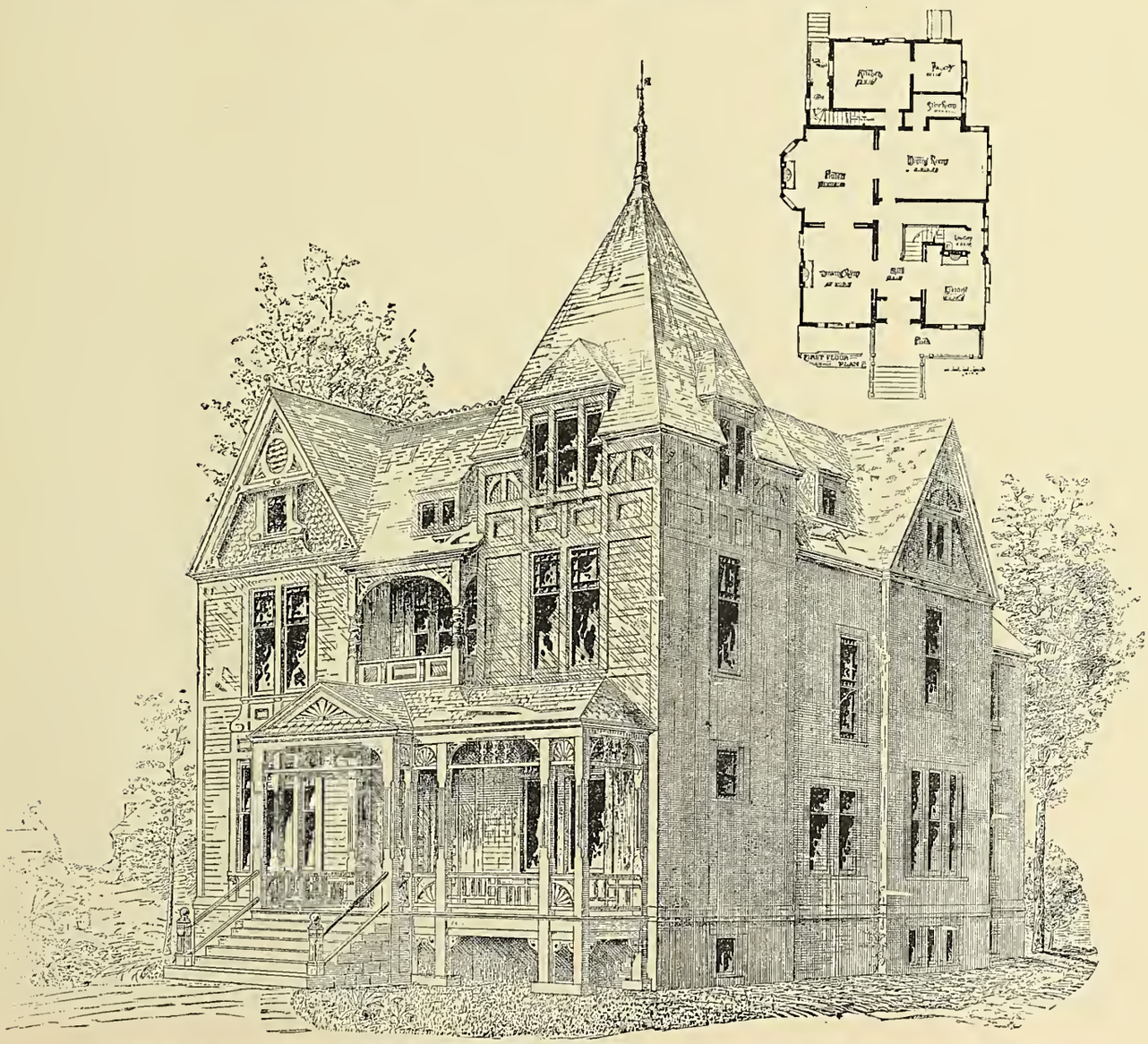
Architect S. M. Randolph is receiving proposals for a residence for Dr. J. H. Buffum. It is to be three stories, 25 by 75 feet, Anderson pressed brick, with brown stone and terra-cotta trimmings, to cost $10,000.

Architects Holabird and Roach report under way for Mrs. Ann E. Webster a St. Louis pressed brick and terra-cotta block of buildings, 146 by 146 feet, on West Madison street and Ogden avenue. The building is triangular in shape, containing a frontage of 146 feet feet each way and will be used for stores and flats; cost $60,000; A. E. & E. A. Wells, mason contractors; A. W. Gronon, carpenter.

Architect C. L. Stiles reports: A block of nine houses for J. D. Beckett, now under way on the corner of Wood street and Ogden avenue, three stories and cellar, Anderson pressed brick with Carbondale brown stone trimmings, 44 feet deep with frontage of 216 feet, cost $40,000; L. Daeglind, mason; Thos. Dowling, carpenter. Also a factory building for Schram Brothers on Armour street near Kinzie, brick, two stories, 40 by 110 feet, cost $7,000; contracts not let. Also a three-story and cellar store building for Mrs. B. Mahoney, at 147 West Jackson street, 25 by 50 feet, cost $7,000. Just finished, a set of plans for a fine residence for W. H. Caldwell, at 508 West Jackson street, two stories, basement and mansard roof, 25 by 64 feet, the basement will be of brown stone, the first



RESIDENCE, BY ARCHITECT GEORGE S. SPOHR.



RESIDENCE FOR PROF. CUMMINGS.—W. L. CARROLL, Architect, Chicago.

story green stone and Anderson pressed brick, and top story of red pressed brick, brown stone, galvanized iron and slate, of odd but tasty design, cost $10,000; contracts not let.

Architects Thomas & Rodger have closed contracts for stores and flats on State street, near Thirty-seventh. for James Viles, Jr., the building to be 46 by 82, three stories, with pressed brick and stone front, and projecting bays in green slate and metal, to cost $17,000. The same architects have made plans for an apartment house 46½ by 100, on the northeast corner of Ontario and Pine streets for a non-resident; there will be four projecting bays in red slate and metal on Pine street, finished with dome-finished turrets and circular and octagon tower on the southwest angle; the two entrances in ornamental terra-cotta and brick will be on Pine street; plans are almost ready for contract. The same architects have planned a flat building on Prairie avenue, near Thirty-second street, west front, 25 by 70, three stories, pressed brick and terra-cotta, with bay in green slate, for Mr. Harmon, contracts for which will be let at once, the building will be ready for the May renting. Also residence on Fifty-fourth street, 22 by 42, two-story and attic, for Mr. Garden. Also about closing contracts for building 108 by 53, Cottage Grove and Thirty-sixth street, three-story stores and flats for John W. Stewart. This with the 156 front adjoining the above, now being built by same architect for G. W. Hoffman, will make a total frontage of 264, and be the most important improvement yet made in this section of the city.

Architect Geo. S. Spohr reports: For Geo. McIntosh, a residence at Bloomington, Ill. For M. Adams, at 9 Lane place, three-story and basement flats, 20 by 70 feet, pressed brick with terra-cotta trimmings, cost $7,000. For H. E. Keeln, at 13 Lane place, two-story and basement residence, 22 by 65 feet, pressed brick and green stone, cost $5,000. For Mrs. Dewire on Wells street, near Oak, three-story and basement flats, cost $7,000. For F. & W. Magnes, on Elm street near Market, two two-story and basement residences, 45 by 56 feet, pressed brick with terra-cotta trimmings, cost $8,000. For Mr. P. Ryan, two-story and cellar residence, 27 by 45 feet, on Elm street, near La Salle avenue, pressed brick and stone, cost $3,500. Two-story and cellar pressed brick and stone residence, 27 by 56 feet, on Kemper place, cost $3,800. For Emil Heinze, two-story cellar and mansard residence, 22 by 60 feet, pressed brick and stone trimmings, cost $4,500; under way on corner of Osgood and Garfield avenues. For F. H. Edles, on Clybourn avenue, flat building, 22 by 70 feet, two-story and basement, cost $4,000; under way. Also in process of erection, on Fullerton avenue, for C. M. Gerhke, two two-story and basement store buildings, 50 by 80 feet, pressed brick and terra-cotta, cost $8,000.

Architect F. H. Waescher reports: For Wm. Schmidt, a four-story and basement stone-front building, 43 by 76 feet, at 75 and 77 Clybourn avenue, cost $18,000; Roessler & Winkler, masons. For Wm. A. Hansburg, on Clybourn avenue, near Dayton, three-story and basement building, 50 by 77 feet, containing factory on first floor and flats above; cost $18,000. For B. Langan, at 294 Superior street, three-story and basement brown-stone residence, cost $8,000; Chas. Thiele, mason. For J. W. Reidy, an extension to his elevator factory, four stories, 22 by 100 feet, and one extra story on the one recently burned, 80 by 100 feet; $20,000 will be expended in the improvement. For the Newberry estate, two additional stores, at 121 to 127 Kinzie street, six stories, 80 by 100 feet, cost $12,000; Chas. Miller, mason; A. M. Mangson, carpenter. For Messrs. Smith & McComb, at 507 to 513 West Kinzie street, a three-story and basement brick factory, 60 by 70 feet, cost $15,000. For Hon. Geo. C. Adams, on the corner of Calumet avenue, Twenty-fifth street and Cottage Grove avenue, a three-story and basement building, 50 feet on Calumet avenue, 50 feet on Twenty-fifth street, and 40 feet on Cottage Grove avenue, containing store, and flats above, with all modern improvements, cost $28,000.

Architects Bauer & Hill report: For Fred Rock, a three-story and basement store and flat building; Anderson pressed brick; on North Wells street; cost $8,000; Helman & Seeman, contractors.

Architect T. V. Wadskier reports: A three-story and basement store for D. Cahn, on Chicago avenue, west of Sedgwick street, of Anderson pressed brick, 24 by 71 feet, cost $9,000; C. P. McKay, carpenter; Leo. Kabell, mason.

Architect J. J. Flanders reports: For Mr. Platt, on Adams street, near Ashland avenue, two two-story and basement residences, Indiana pressed brick, Bedford stone and terra-cotta trimmings, 20 by 50 feet, cost $5,000 each; contracts not let. Also building a brick residence for Mr. J. Counde, two stories and basement, with stone trimmings, 22 by 60 feet, cost $6,000.

Architect J. M. Van Osdel reports: For Samuel Wayman, a three-story brick flat, on Adams street, near Aberdeen, 25 by 82 feet, cost $7,000; under way.

Architect H. D. Deam reports: For Garner & Co., a brick block for stores and flats, 43 by 52 feet, corner Thirty-first and Hanover streets, cost $6,000; Mr. Beil, contractor.

Architect Ed. Baumann reports: Under way, a block on the northeast corner of Wells and Ontario streets, for Geo. W. Smith, brick, with stone front, 75 by 100 feet, three stories and basement, containing four stores and fourteen flats, cost $32,000; E. Ernshaw, mason; J. L. Diez, carpenter. Also plans for a building for Wm. H. Lehmann, on Hurlbut street, south of Webster avenue, stone front, two stories and basement, 24 by 57 feet, cost $6,500; contracts not let. Also building for Joseph Theurer, at 1809 Indiana avenue, brick front, stone trimmings, three stories and basement, 28 by 82 feet; cost $16,000; John Griffith, mason; Edmonds & Hay, carpenters.

Architects Baumann & Lotz report: For Messrs. Armour, Dole & Co., a corn-crib, 96 by 393 feet, to be erected adjacent to elevator D. on Morgan slip, near Twenty-second street; cost $82,000; contracts not let.

Architect J. H. Huber reports: Has plans for a three-story and basement store building, for J. Raskop, on State street, near Walton Place, cost $5,000; contract not let. Also plans for a brown stone three-story and basement residence, 40 by 60 feet, for Mr. E. Faber, at Staten Island, cost $40,000; contracts not let. Plans for two-story and basement frame residence, 30 by 40 feet, at Staten Island, for Mr. E. Huber, cost $5,000. And making alterations, etc., in the residence of Mrs. Prieth, at Newark, N. J., cost $6,000.

Architect L. G. Quackenboss reports: A residence for F. C. Porter, on Cottage Grove avenue, Rhodes avenue and Thirty-first street. It is of St. Louis pressed brick, five stories and basement, with stone trimmings, and is triangular in shape, occupying 100 feet on each avenue and street, cost $70,000. Also building the deposit vault for the Dime Savings Institution, corner of Clark and Washington streets, of English enameled brick facing, largely built of iron. The Hall Safe & Lock Co. furnish the fittings, and J. Barker & Son are the contractors; cost of improvement $25,000.

Architect Theo. Karls reports: For Aug. Schwarz, two houses at 150 and 152 Illinois street, three-stories and basement Anderson brick fronts, 40 by 58 feet, containing six flats, cost $12,000; contracts not let. For Tarrant Ramsay Iron Foundry, 156 and 158 East Indiana street, one story, 30 feet high, 50 by 100 feet, cost $5,000. For Mrs. C. Trapp, at 28 Burling street, two stories and basement, flats, 25 by 68 feet. cost $5,000. For Mrs. Catharine Deeden, on Wells and Wendle streets, three stories and basement flats, 27 by 70 feet, cost $14,000. For himself, Mr. Karls is building a residence on Deming court, at Lake View, Anderson pressed brick front, two stories, attic and cellar, 32 by 66 feet, heated by steam, cost $8,000.

Architect Otto Matz has drawn plans for a dwelling for J. M. Faulkner, at No. 526 North Clark street, to cost $15,000. The structure will be 28 by 100 feet, and when completed will be one of the finest residences on the street. Is also remodeling the residence of Bernard Rocsing, on West Monroe street, cost $4,000; just finished. A new barn and stable on Seward street, for Mr. Schoenfen. The stable is 100 feet square and one of the finest in the city, cost $30,000. Also finished a residence on Cass street, for A. H. Claussenius, cost $18,000.

Architect H. M. Hansen reports: Plans for a brick residence, 34 by 60 feet, at Lake View, for Theo. Fruman, two stories and basement, slate roof, cost $10,000. Also barn in connection with same; contracts not let. Also building on Morgan street, a three-story block of houses for S. T. Gunderson, pressed brick fronts, 23 by 55 feet each; contracts not let. Also a store and flat building, on Chicago avenue near Ashland avenue, for J. L. Alstrim. three stories and cellar, 80 by 24 feet, cost $9,000. Under way for Mr. John Kirkby, on Road Street and Milwaukee avenue, three stories, basement and attic, stone front, on the corner lot, 22 by 76 feet. Also small building, on the rear of lot 24 by 26 feet, total cost of improvement, $10,500; contracts not let.

Architect L. G. Hallberg reports: Building a two-story and basement residence for H. C. Anderson, at 539 Leavitt street, Indiana pressed brick, 21 by 50, containing fourteen rooms, cost $6,000. For P. Grady, at 443 West Harrison street, about 24 by 65 feet. For D. W. Mitchell, 635 West Adams street, three stories and basement, ornamental moulded, pressed brick front, 35 by 70 feet, containing 25 rooms, cost $8,000; Geo. Olson, carpenter. Also residence on South Park avenue, near 32d street, for Mrs. Eliza Williams, pressed brick front and side, three stories, and basement of Bedford stone, dormer window and tower in front and bay on side, cost $10,000; A. J. Hageman, mason. Kenssel Bros., on Wells street, corner Menominee street, a brick block of three houses two stories and basement of broken Ashler Anderson and Indiana pressed brick, 71 by 64 feet, cost $16,000; Messrs. Fagerland & Nelson, masons; A. Moore, carpenter. All the above are under way.

Architect F. B. Townsend reports: Raising of building for Mr. W. S. Hall, at 1460 Wabash avenue, and adding two stories below, cost $5,000. Alterations in skating rink, corner of Michigan avenue and Congress street, cost $5,000; additional story on stables, for W. M. Hoyt & Co., on Kinzie street, cost $3,000. Also building private stable for Mr. N. T. Wright, on Michigan avenue, near 29th street, cost $3,000.

Architect A. M. L. Colton reports: Excavation for a fine block for Mrs. C. H. McCormick, on Jackson and Market streets, six stories and basement, of Anderson pressed brick, 100 by 120 feet. The first story of the corner building will be used by the McCormick Harvesting Machine Company for general offices, the remainder for wholesale purposes to be rented out. The treatment in front is something entirely different from anything in that portion of the city and will be treated as arcades. The entrance on the corner will be on a display angle in Gothic style. All the stone work on the building will be McArthur brown stone. Mr. Colton is also erecting a block of seven houses on Belden avenue for the Northwestern Presbyterian Seminary, brick two-story, cellar and mansard roof, 22 by 46 feet each, cost $30,000; L. Weicke, mason; H. Gilsdorf, carpenter. Also four on Dunning street, for the Northwestern Presbyterian Seminary, two stories and cellar, 20 by 43 feet, cost $12,000; L. Weicke, mason; R. W. Growon, carpenter.

Architect B. W. S. Clark reports: Building for himself at Englewood two frame residences, two stories and basement, 30 by 53 feet each, cost of the two, $10,000. Also a frame cottage for C. H. Coldwell, at Englewood, two stories and basement, 25 by 47 feet, cost, $5,000. Also for D. W. Gordon two story frame flats, 25 by 69 feet, at Hyde Park, cost $6,000; Mr. Reynolds, contractor.

Architect L. B. Dixon reports: Plans for a brick block of six houses, two stories and basement, for B. R. DeYoung, on Prairie avenue, near 36th street, 113 by 64 feet, cost $18,000; contracts not let.

Architect Cass Chapman is building a young ladies' boarding college and hall, four stories and basement, 100 by 100 feet, in Iowa, cost $25,000.

Architect Henry Sierks has plans for a block of five stone front buildings, two stories and basement and attic, 44 by 132 feet. on Scott and Stone streets, for Mr. Poulson, cost $30,000; contracts not let. Also has plans for a four-story and basement brick block pressed brick front stone trimmings, containing twelve stores in all and offices and flats, for J. Goggin, cost $30,000; contract not let.

Architect L. D. Cleaveland reports: Under way for Mrs. A. L. Darkin, on Wabash avenue and 31st street, three-story store and flat building, 24 by 116 feet, cost $18,000; W. A. Barton, mason; Steinmetz & Eilenberger, carpenters.

Architect W. H. Adams reports: Just completing for A. Bowles, on Fifty-third street in Hyde Park, a two-story attic and cellar residence, with high steep roof, octagon bay in front, 26 by 38 feet.

Architect O. Johnson reports: A frame residence for D. H. Hubbard at Woodlawn, Queen Anne in style, cost $4,000; under way; John Alloway, contractor. A brick store on West Lake street and Kedzie avenue, two stories, 22 by 50 feet, cost $3,500. A parsonage for the Swedish church at Joliet, frame structure, two stories and basement, 22 by 36 feet, cost $1,500.

Architect H. F. Starbuck reports: A brick dwelling house on Rosalie Court in Hyde Park for Wm. Waterman, two stories and basement, 30 by 52 feet, cost $8,000; under way; F. D. Reynolds, contractor. Also a brick barn and stable for the Lincoln Ice Company at Lake View, 60 by 125 feet, two stories; cost not yet estimated; contracts not let.

Architects Saxe & Barfield report: For F. S. Southwick, a three-story block, of stores and flats, brick with stone front, 60 by 26 feet, at 401 West Van Buren street, cost $7,500; John McGinnis, mason; Minke & Maroskie, carpenters.

Architects Schaub & Berlin report: For Chas. Heinze, at 28 Evergreen avenue, a two-story and basement residence, 22 by 70 feet, square bay in front, Anderson pressed brick and blue Berlin stone trimmings, stained glass transoms, cost $7,500; Chas. Krueger, mason; Minke & Maroskie, carpenters. For F. W. Luebs, at 12 Fry street, a two-story and basement and attic residence, of Anderson pressed brick and Berlin blue stone trimmings, 25 by 54 feet, cost $6,000; Eich & Otte, mason contractors; Mr. Koepeke, carpenter. Also three-story store and flats with attic, 22 by 75 feet, for Mrs. R. Hasterlik at 216 DeKoven street, of Indiana standard pressed brick front, cost $8,000; F. Thuman, mason; Westphal & Neuman, carpenters. Also a building for L. Krueder, on Center street corner of Sheffield avenue, two-story and basement flat of standard Indiana brick, stone trimming, 23 by 65 feet, cost $4,500; contracts not let. Also for John Schokenecht, at 17 Moorman street, two stories and basement flats, 21 by 82 feet, cost $4,500; contracts not let; other buildings under way.

Architect H. Copeland has made drawings for a three-story store and dwelling for John Pepper, to be built at No. 406 Ogden avenue.

Architect A. Williams is building two two-story dwellings, 40 by 48 feet, for Williams & Carson, at Nos. 278 and 280 Idaho street, to cost $10,000.

Architect Alfred Smith has made plans for eleven three-story dwellings, 180 by 42 feet, at Nos. 1 to 15 Elizabeth street, for A. J. Snell, to cost $45,000. Has also planned a three-story dwelling, 23 by 70 feet, at No. 247 West Polk street, for A. Johnson, to cost $10,000.

Architect Wm. Longhurst reports: Plans for a residence for Mr. G. Cure, two stories and basement, on Dearborn street, between Thirty-fourth and Thirty-fifth streets, cost $4,500; contracts not let. Also a two-story residence, 72 by 26 feet, for F. A. Helmer, at 220 Michigan avenue, cost $10,000; C. P. McKay, contractor. Also a two-story basement dwelling, 24 by 58 feet, for E. B. Rober, at No. 868 Fulton street.

J. W. Vilas will build for himself two three-story and basement stores and flats, 46 by 82 feet, at Nos. 3769 and 3711 State street, to cost $12,000.

Turner & Bond have taken out a permit for fifteen one-story cottages to be erected for David Davis on Parnell, near Thirty-first street, at a cost of $25,000.

John Rober will build a store and flat building corner of State and Thirty-seventh streets at a cost of $10,000.

Columbus, Miss.—Architect W. S. Smith reports: For J. B. Bell, two cottages, 42 by 52 feet, cost each $1,800. For Mrs. Ada Sykes, seven room frame cottage, 48 by 52 feet, cost $3,000. First National Bank Building, brick, 21 by 65 feet, cost $7,500; under way. For I. M. Johnson, residence with Mansard roof, 48 by 60 feet, cost $7,000; under way. For John Robertson, seven-room cottage, 46 by 65 feet, cost $1,500; under way. For J. D. Morgan, block of three-story brick buildings, 88 by 120 feet, cost $20,000; just finished. For J. S. Bishop, three-story and Mansard residence, 58 by 70 feet, cost $12,000; just finished. For Capt. L. M. Tucker, ten-room cottage, 54 by 62 feet, cost $8,000; just finished. A two-story brick factory building, 42 by 800 feet, cost $40,000; just finished. Also several cottages, costing about $1,500 each.

Denver, Colo.—Building business is very dull. During July there were 33 permits granted to erect buildings, costing $60,500. In August 36 permits, costing $48,570. The most important of which were: L. Aufenger, two story brick dwelling, 35 by 61 feet, costing $7,500, Champa street, between 29th and 30th, W. Quayle, architect; P. Funke. builder. U. S. Government, for excavation and foundation of U. S. P. O. building and Custom House, to be done by day's work, Arapahoe and 16th streets; M. E. Bell, architect. George Charpiot, two-story brick block stores and dwellings, 50 by 125 feet, costing $18,000, Larimer street, between 30th and 31st, E. P. Brink, architect; C. W. Abbott, builder: Arapahoe County, one-story brick addition to hospital for boiler-house, 24 by 36 feet, costing $5,000. Carson street, between Evans and S. 14th, Wm. Quayle, architect; Harvey and Washburne, builders. W. R. Owen, two-story brick dwelling. 35 by 57 feet, costing $7,000, Lincoln avenue, between E. 16th and 17th, Robert S. Roeschlaub, architect; Hallack & Howard, builders.

Des Moines, Iowa.—Architects Foster & Liebhe report the following work for the year 1884, up to date. At Des Moines—work completed—Masonic temple, three-story and basement brick and stone building, 72 by 134 feet, cost complete $50,000. Brick and stone business block on 2nd street, three-story and basement, for L. Harbach, cost $15,000. Two-story brick and stone business block, 6th and Walnut streets, for Dillworth & Rappleye, cost $10,000. Brick and stone French flat building, five-story and basement, 60 by 80 feet, on E. Locust street, for Messrs. Robertson, Stone & Garton, cost $33,000. Two-story brick business block on W. Walnut street, for George Whittaker, 44 by 132 feet, cost $12,000. Three-story brick and stone residence, on Greenwood avenue, for J. H. Windsor, cost $35,000. Two-story frame dwelling, on N. 9th street, for F. Lehman, cost $4,000. Block of three-story brick and stone city residences, four fronts, W. 15th street for Wright & Moore, cost $12,000. One-story frame cottage, N. 9th street, for George Cassiday, cost $1,500. Row of city residences, five fronts, for the Rollins family, N. 3rd street, of brick, three stories high, cost $20,000. Two-story frame residence, N. 9th street, for J. Tone, cost $5,000. Two-story frame dwelling, in N. Des Moines, for Judge Day, cost $7,000. Remodelling Moore's Opera House, cost $4,000. Work in progress: Queen Anne cottage, on W. 18th street, for Fred Brown, cost $1,500. Four-story and basement pressed brick front business block, on Locust street, for C. Youngerman, cost $25,000. Three-story Queen Anne residence, Greenwood avenue, for H. D. Hedge, cost $10,000. Three-story frame residence, on Woodland avenue, for L. Sheurman, cost $15,000. Three-story and basement business block, brick, 4th street, for D. Lehane, $13,000. Franklin school building, of brick and stone, three stories high, on N. 12th street, cost $16,000. One-story frame Queen Anne cottage, 10th street, for L. Goldback, cost $1,200. Three-story and basement cracker factory, for J. M. Christy, 2nd street, cost $9,000. Two-story frame residence, in N. Des Moines, for C. Howell, cost $4,500. Brick and stone addition to Hawthorne school building, cost $6,000. Two brick double

city residences, W. 9th street, for C. H. Getchell, cost $7,000. New Episcopal Church, built of Sioux Falls red rock, trimmed with buff sandstone in Gothic styles, cost $40,000. Aside from the above, Foster & Liebbe have the following work in various parts of Iowa: At Knoxville—Frame church, one-story, cost $4,500. At Marshalltown—Two-story frame Queen Anne residence for Col. Bowler, cost $6,000. At Sandborn—One-story frame church, cost $3,000. At Guthrie Centre—Two-story frame dwelling for Col. Dewey, cost $5,000. At Boone—Three-story brick hotel, cost $16,000. One brick business bloek, four fronts, for Messrs. Webb, Moore & Miller, cost $20,000. Addition to school building, cost $2,500. At Osceola—Frame bank building, one story, for Messrs. Riley and Coles, cost $2,000. At Grinnell—two-story frame residence, for C. W. H. Beyers, cost $4,500. Two-story brick business house for H. L. Spencer, cost $4,500. One-story frame Queen Anne cottage for Lyman Spencer, cost $2,500. At Charles City—Two-story frame residence for A. G. Case, cost $7,500. Two-story frame dwelling, for C. H. Baldwin, cost $4,500. At Lake City—Two-story brick school building, cost $8,000. At Carrol—Improvements in school building, cost $2,000. At Rhodes—Two-story brick school building, cost $7,000. At Le Mar—Alterations in dwelling for Lawrence, cost $1,500. At Harlan—Two-story frame residence, for C. Escher, cost $5,000 At Algona—Two-story brick school building, to cost $16,000. At Ottumwa—Four-story brick hotel building, to cost $60,000. At Ames—New buildings for State Agricultural College, cost $25,000. At Muscatine—Three-story brick residence, for P. M. Musser, cost $20,000. At Cedar Rapids—Masonic library building, of brick and stone, cost $25,000. At Hot Springs, Arkansas—Two-story frame dwelling, for Mr. York, cost $7,000. Are now busy on the plans for the new State Insane Asylum, to be built at Clarinda, and to cost upwards of $1,000,000.

Architect C. H. Lee reports: For J. Breckenridge, three-story stone front business block, 20 by 75 feet, cost $6,200: nearly completed; J. A. Woods & Co., carpenters. For H. C. Potter, two-story frame dwelling, 44 by 70 feet, cost $7,000; nearly completed. For J. H. Philips, two-story brick residence, 24 by 40 feet, cost $4,200; completed. For M. Flynn, two-story frame dwelling, 31 by 56 feet, cost $3,100; just commenced. For M. M. Winsell, frame cottage, 30 by 46 feet, cost $1,800; under way. For T. J. Burns, two-story brick-veneer business block, 27 by 80 feet, cost $4,500; about finished. For Jno. Vorse, two-story frame cottage, 30 by 42 feet, cost $2,000; completed.

Architects Josselyn & Taylor report: For G. L. Sanders, Grinnell, Ia., two-story and basement frame residence, steam heat, plumbing with hot and cold water, 1,800 square feet on ground, cost $8,000; just completed; R. M. Kellogg, builder. For Shaver & Dows, addition to cracker factory, three stories and basement, 44 by 66 feet, brick, gravel roof, cost $6,000; under way; F. S. Whitney, carpenter; E. D. Jones, mason. For E. S. Miller, two-story and basement frame residence, cost $3,000; under way; Thos. Allum, builder. For Miss Belle Bartholomea, frame cottage, cost $700; under way; J. W. Poulson, builder.

Detroit, Mich.—Architects, generally, speak of the fall season as an improvement on the summer, which was somewhat dull.

Architect W. G. Malcomson reports: For Thos. G. Craig, two-story brick dwelling, 30 by 60 feet, slate roof, cost $6,000; under way. For Richard Bourke, two-story brick and stone store building, 40 by 60 feet, cost $5,500; Peter D. Tallant, builder. For Charles Crowe, two-story brick and stone store building, 22 hy 65 feet, cost $3,600; just completed; Peter D. Tallant, builder. For Mrs. Wirts, a two-story brick and stone store building, 30 by 45 feet, cost $3,000; just completed: Henry Roedger, builder. For Jas. Morrison, two-story frame building, 22 by 55 feet, cost $4,000; John Lamore, builder. For Dan. Sullivan, three one-story frame cottages, 20 by 56 feet, cost $3,500; just completed. For Wm. Carson, two-story double brick dwelling, 50 by 65 feet, cost $8,000; projected. For James Harrison, colonial frame cottage, 20 by 46 feet, cost $2,000. For Thos. Shehan, two-story double brick dwelling, 42 hy 60 feet, cost $4,500; under way; Goodenow & Co., masons; Martin Dunn, carpenter.

Dubuque, Iowa.—The German Catholics of New Wine township, in this county, are about to erect a stone church to cost $60,000. The corner-stone was laid on Sunday by Bishop Hennessy, assisted by a number of priests, with imposing ceremonies.

El Dorado, Kas.—Outlook for fall very good. Mechanics arc quite busy at good wages.

Architect N. A. Collins reports; For Mr. Smith, two-story brick, 22 by 90 feet, cost $5,000. For Mr. Landon, two-story brick, 22 by 90 feet. For Mr. Elliott, two-story brick opera house, 44 by 90 feet, cost $6,500. For Mr. Lealan, two-story brick, 24 by 40 feet, cost $4,000. Two two-story brick school houses, 40 by 44 feet, cost $2,500 each. Also eight one-story frame dwellings, ranging from $800 to $1,500, and five two-story frame dwellings, aggregating about $17,000. All the above have been completed this season.

Fergus Falls, Minn.—Four fine brick blocks, costing in the aggregate about $100,000, are in the course of construction. The contract for the superstructure of the First National Bank has been awarded to Markham & Son. Indiana pressed brick is to be used in the construction of this building, which is to cost, when completed, about $35,000.

Flandreau, Minn.—A large academy will be erected here next spring at a cost of $10,000, to be in charge of Prof. Perry.

Fort Wayne, Ind.—There has been fully as much building done here this season as last, and the steady improvement in the general class of buildings is noticeable in those erected recently. The outlook is very encouraging and prospects of a good fall and spring are flattering.

Architects J. F. Wing & Co. report for John C. Peters a two-story basement and attic residence, 38 feet front, brick with Michigan sandstone trimmings, rock faced range work, slate roof, cost $6,000; under way. For Henry C. Paul, two-story basement and attic, Michigan sandstone trimmings, rock faced range work, 40 by 60 feet, cost $6,000, under way. For Wm. H. Trammel, at Huntington, Ind., two-story and basement brick store building, 22 by 60 feet. Iron trimmings and roof, cost $4,000, projected. For Judge Chapin, two-story basement and attic brick house 22 by 65 feet, cost $4,000, projected.

Glenn, Mich.—Outlook good.

Architect A. H. Tracy reports: For C. S. Smith, one-and-a-half story, gothic residence, 51 by 40 feet, frame with stone basement, cost $2,200, completed; C. Wood; builder. For L. L. Lance, two-story store building, 47 by 70 feet, second story is to be used as a hall, cost $2,000; under way. Also residences, a school house, several barns, etc., aggregating about $5,000, mostly all under way.

Grand Rapids, Mich.—A number of small dwellings are being built here, and mechanics seem to keep busy, but building of the better class seems about done for the season.

Architect D. S. Hopkins reports: For Mr. N. A. Beneke, a frame dwelling to cost $2,500; under way; Fred Miller, builder. For Mr. J. B. Evans, a frame dwelling, cost $2,500; under way. For Miss McDowell, frame dwelling, cost $2,000; under way. For Mr. C. Macomber, at Burlington, Vt., frame dwelling, cost $6,000; under way. For Albert Kavalege, at Janesville, Wis., frame dwelling, cost $3,000; under way. For C. S. Kingsbury, at Cassopolis, Mich., a frame dwelling, cost $6,000; under way. For Chas. Van Sickle, at Muskegon, Mich., frame dwelling, cost $2,000; projected. For E. E. Palmer, Imlay City, Mich., frame dwelling, cost $3,000; under way. For W. E. Huston, Lockport, N.Y., frame dwelling, cost $5,000; under way. For G. E. Stockbridge, Kalamazoo, Mich., frame dwelling and stable, cost $8,000; projected. For E. B. Raymond, Mazeppa, Minn., frame dwelling, cost $3,000; under way.

Green Bay, Wis.—Outlook is, if anything, a little better than at this time last year. A large amount of repairing and remodeling is being done at present.

Architect D. M. Hartman reports: For Mr. E. L. Kindell, two-and-one-half-story frame dwelling, 36 by 60 feet, cost $4,500; under way. For Mrs. Skeels, two frame cottages, 30 by 48 feet, cost of both, $2,500; under way. For Mrs. Hoghgraves, two-story brick-veneered dwelling, 30 by 58 feet, cost $2,100; under way. For J. Bebean, at Fayette, Mich., two-story frame dwelling, 30 by 60 feet, cost $3,000; under way. For Mr. J. Gravell, at Fayette, two-story frame store building, 24 by 50 feet, cost $1,200; under way. For Rev. J. Fox, at Marinette, Wis., Catholic school, two-story brick-veneer building, 62 by 68 feet, cost $9,000; under way. Also remodeling Brown County Poor House into Insane Hospital, with accommodations for one hundred inmates. It is a three-and-one-half-story building, 60 by 100 feet; repairs cost $4,500; under way.

Hamilton, Ohio.—Architect Max Reutti reports: For Shuler & Benninghofen, business block, 70 by 75 feet, three stories high, freestone front, cost $25,000; under way; J. S. Bender & Bros., builders. For Wm. Bender, two-story brick dwelling, 36 by 54, asbestine stone trimmings and slate roof, cost $4,000; under way. For Mrs. Hermann, two-story frame dwelling, 16 by 46 feet, cost $1,200; under way. For E. P. Newell, two-story frame dwelling, 18 by 28 feet, cost $900; under way. For Board of Education (Hamilton Co.), two-story brick school house, 28 by 49 feet, cost $3,200; under way; Jayce & Hansford, builders. Also one-story brick school house, 28 by 38 feet, cost $2,000; under way.

Hannibal, Mo.—Outlook very favorable for fall work.

The stone and brick work on the Post Office and Custom House has just been let to Messrs. Minkey & Larbworthy for $23,160.

Architect Jas. O. Hogg reports: For Mr. Geo. A. Hawes, addition to residence, two-story and attic, pressed brick front, galvanized iron and stone trimmings, size of building complete, 38 by 48 feet, cost of improvement, $5,000: plans completed; work not let. For J. Oliver Hogg, two-story frame dwelling, 29 by 50 feet, cost $4,000; nearly completed. For B. T. Jones, three-story brick tenement, 66 by 50 feet, cost $5,000. Remodeling of interior of Colored Baptist Church building, cost $1,200; work just commenced. For Talbot & Co., at Fayette, Mo., two-story brick store building, 41 by 100 feet, galvanized iron front, cost $10,000; under way; Knisely & Miller, of Chicago, furnish the galvanized iron work.

Illinois Corporations.—The Globe Electric Engineering Company, of Chicago, Ill.; capital $200,000; incorporators, Herbert A. Streeter, Henry Burkholder and George W. Wilbur. The Granolithic Company of Chicago; object, to manufacture and sell granolithic for pavements, roadways, steps, landings, floors, and foundations; capital stock, $100,000; incorporators, Matt. Taylor, David Wilie and Percy L. Bauman.

Jamestown, Dak.—Architect T. M. Grove reports the following: North Side schoolhouse, nearly completed; style, modern gothic; construction, brick; T. M. Grove, architect; Nicolas Muller, builder; cost $15,000. Klaus, hotel, in process of construction; built of brick; style, modern Renaissance; architect, Mr. Koch, of Milwaukee; builder, H. C. Hotchkiss; cost $30,000. Lloyd's hotel, nearly completed; brick veneered; T. M. Grove, architect; Nicolas Muller, builder; cost $20,000.

Kansas City, Mo.—Outlook good.

Architect A. VanBrunt reports: For The Egan Co., at Cincinnati, O., five-story warehouse, 50 by 130 feet, cost $16,000; under way. For Albert Manly, four-story warehouse, 48 by 100 feet, cost $14,000; foundations just in; balance not yet let. For Mr. P. E Hatch, double brick dwelling, 42 by 60 feet, cost $8,000; nearly finished. For Mr. P. C. Gage, remodeling dwelling at a cost of $6,000; completed. For T. K. Hanna, a suburban brick dwelling, cost $15,000; plans under way. For Howe, Rhodes & Co., addition to warehouse, cost $3,500; under way. Repairs and new galleries Second Presbyterian Church building, cost $5,000; completed. For Mr. K. B. Annom, brick and terra-cotta dwelling, cost $10,000; plans under way. For Mr. E. Case, double brick dwelling, cost $8,000; plans under way.

Keokuk, Ia.—Nothing doing in the building line, and no prospect of much being done this fall.

Architect I. C. Wykoff reports: For Constitution Printing Co. a four-story brick building, 50 by 90 feet, cost $15,000; completed. For Mr. J. R. Shuler, a two-story brick business block, 24 by 86 feet, cost $3,500; near completion. For Mr. M. Yonkens, a three-story brick business house, 24 by 120 feet, cost $4,000; completed.

Lincoln, Ill.—Architect W. Hunter reports for Mr. E. Webster: A two-story brick store building, 21 by 80 feet, cost, $3,000; nearly finished. For Mr. J. Schwarz a two-story brick store building, 19 by 80 feet, cost $2,200; nearly completed. For Mr. J. Mundy, two-story brick store building, 20 by 75 feet, cost $2,000; nearly completed. For German Evangelical Society, brick and frame church building, 40 by 80 feet, cost, $8,000; under way.

Lexington, Ky.—Architect F. L. Lundin reports: For John I. Shelby, two-and-a-half-story brick residence, 36 by 59 feet, cost $5,600; under way. For Wm. Campbell, three-story business house, 31 by 120 feet, brick and stone construction, cost $10,000; nearly completed. For Julius Speyer, two and-a-half-story residence, 40 by 59 feet, brick and stone construction, cost $6,000; under contract. For Mrs. C. Elliott, two-story brick residence, 35 by 58 feet, cost $4,225; under contract. For C. S. Brent & Bro., four-story brick warehouse, 40 by 85 feet, cost $10,150; under contract. For C. F. Featherstone, two-story brick residence, 34 by 60 feet, cost $4,000; under contract. For W. R. Milward, two-story brick residence, 37 by 58 feet, cost $3,950; under contract. For B. M. Arnett and others, at Nicholasville, Ky., church building, 40 by 64 feet, cost $6,800. For J. F. Hunton and others, at Paris, Ky., three three-story stone and brick business houses, 75 by 120 feet, cost $15,000. For Alex. Butler, two-story frame residence at Millersburg, Ky., cost $4,000. All the above are under contract.

Lincoln, Neb.—Considerable work in progress, and outlook very encouraging for next season, though it is expected but little new work will be started this fall.

Architect A. Roberts reports for C. W. Griffith: Frame dwelling, cost $7,000. For L. W. Eldridge, at Fairbury, Neb., brick store building, 25 by 80 feet, cost $7,000; under way; school house at Sutton, Neb., cost $6,000; underway. For 1st National Bank, at Red Cloud, Neb., bank building 25 by 60 feet, cost $6,000; under way; F. S. Potwin, contractor. At Tecumseh, Neb., four-room school house, cost $6,000; under way. At Valparaiso, Neb., four-room school house, cost $4,000; under way. At Sutton, two-room school house, cost $3,000; under way. At Milford, Neb., Congregational Church, cost $4,000; under way. At Beatrice, Neb., dwelling, 40 by 60 feet, cost $7,000; under way for J. B. Weston. For S. L. Andrews, at Crete, Neb., dwelling, cost $6,000; under way. For Mr. Butler, at Fairmount, Neb., dwelling, cost $2,000; projected. For Judge Zimmerman, at Hutchinson, Kan., dwelling, cost $4,000; projected. At Crete, Neb., four-room school house, cost $3,000; under way; O. W. Lyon, builder. For Jos. E. Lamaster, at Lincoln, business house, 25 by 90 feet, cost $10,000; under way; D. L. Graham, contractor. For C. E. Montgomery, business house, 25 by 120 feet, cost $11,000; under way; J. J. Butler, contractor. For W. W. Wilson, business house, 25 by 60 feet, cost $5,000; completed; O. W. Lyon, builder. For W. J. Marshall. business block, 46 by 136 feet, cost $15,000; under way; W. B. Hughes, contractor.

Mankato, Minn.—Architect Pass has plans for several business blocks and residences. The new Catholic church has been commenced and will be pushed forward at once. The large elevator of the Mankato Linseed Oil Company is fast approaching completion. Work has been commenced on the West Mankato school building. The Mankato Cement Works will be enlarged by the building of a new warehouse capable of holding 20,000 barrels.

Minneapolis, Minn.—Baker, Potter & Co. are to erect a five-story brick warehouse, 40 by 80 feet, on First street, to cost $15,000. Also a grain elevator, 60 by 200 feet, on First street, to cost $75,000. Miss A. Wetherbee is to build a two-story double dwelling, eighteen rooms, on Fourteenth street, to cost $6,000, C. Wright Davidson is to build a two-story dwelling, on Highland avenue, cost $4,500. H. Hutchins will erect a two-story double tenement, corner Hawthorne avenue and Seventh street, cost $9,000. C. M. Loring has commenced work on his new and handsome residence on Fifteenth street, after plans by G. M. Goodwin. The house will not be large, but it will be exceedingly attractive, cost $10,000. Monroe Bros. are building a tenement block on Vine place. The block will contain five houses, cost $10,000. C. H. Archard is building a house to cost $6,000 on Seventh street.

Architect W. A. Hunt has just completed plans for a fine residence for Gen. L. A. Grant, on Prospect street, near Spruce place. The first story interior will be finished in birch and cherry. A tower on one corner will add to the architectural beauty of the structure, which will stand on high ground overlooking the city, forming a conspicuous and ornamental object. The cost will be about $10,000. Mr. Hunt has finished plans for a fine residence for Dr. Reed, to cost $7,500, located on Seventeenth street, near Central Park. The building has already been commenced.

Architect I. W. Kelly is making plans for a $2,000 residence, soon to be erected for S. F. Zesbaugh, near Lyndale avenue. P. G. Lamouaux has recently completed three very substantial houses of fine appearance, good finish and commodious arrangement, on Nicollet avenue, between Thirty-second and Thirty-third streets. The school building on Maben, White & LeBron's addition is now under roof and presents a fine appearance. Its total cost when complete will be $20,000.

J. H. Thompson has broken ground for another $8,000 double house on Highland avenue in Oak Lake. Dr. Salisbury also proposes to build in Oak Lake this fall.

Donald Kennedy is to build a $25,000 house on Park avenue, between Twenty-second and Twenty-fourth streets. Work will probably not be commenced until spring.

G. A. Salmon is to build a handsome double house on his lots on Highland avenue in Oak Lake, to cost $4,500.

The sisters are to build for a Catholic girls' school a building two stories high and made of stone, and to cost $10,000. It will be located on Second street north, between Eighth and Ninth avenues.

Among the recent building permits are the following: Charles G. Martin, executor, etc., one-story brick boiler house, southwest corner Seventh avenue south and Canal street, cost $6,000. J. H. Davenport, two-story, 16-room wooden dwelling east side Vine Place, between Nineteenth and Twentieth streets, cost $6,500. S. E. Foster, two-story, eight-room wooden dwelling and barn, south side Laurel avenue, between Lyndale and Nineteenth street south, cost $4,300.

Roman Catholic church and school building, West side, Second street, between Eighth and Ninth avenues northeast, cost $10,000. J. H. Thompson, two-and-a-half story twenty-room double tenement, brick veneer, East side, Highland avenue near Royalston, cost $8,000. James C. Plant, two-story twelve-room brick veneer dwelling, northeast corner Twenty-seventh street and Portland avenue, cost $8,000.

Milwaukee, Wis.—The following building permits have been issued recently: A building for Fred. Mueller, costing $2,500 on lot 11, block 100, Eighth street, Ninth ward.

A foundation costing $1,200 for Geo. Hawsworth, on lot 20, block 212, State street, Second ward. A store costing $3,200, for F. Westphal, at the corner of Vliet and Fifteenth streets, Second ward. A dwelling for B. Gross, costing $4,500, on lot 14, block B, Van Buren street, First ward. A dwelling costing $50,000 for Valentine Blatz, on lots 1 and 2, block 76, Division street, Seventh ward. A frame store, costing $1,000, for James Hogan, on lot 12, block 41, Chicago street, Third ward. A shop, costing $1,500, for F. J. Buff, on the north half of lot 10. block 27, Fifth ward.

Mt. Sterling, Ky.—Outlook good.

Architect J. A. Bassett reports for R. P. Scobee frame residence, cost $3,000; under way. For R. D. Hunter, brick residence, cost $4,500; under way. For J. D. Rayland, frame residence, cost $3,000; under way. For D. E. M'Coombs, brick residence, cost $2,700; under way. For W. T. Hanley, brick residence, cost $4,000; under way. For Henly & Judy, brick business house, 25 by 100 feet, cost $6,000; completed; E. Williams, builder. For M. McCloskey, brick business house, 23 by 70 feet, cost $5,000; completed; T. M. Leach, builder. For A. Baum, brick business house, 22 by 75 feet, mansard slate roof, cost $3,000; under way. For Farmers' Bank, brick building, 25 by 40 feet, cost $4,500. For M. E. Church Society, brick church, 45 by 70 feet, cost $12,500; completed; Geo. Rice, builder. Brick Presbyterian church building, 35 by 40 feet, cost $9,000; under way; G. W. Moore, builder. Brick Presbyterian church building, 36 by 56 feet, cost $5,500; under way; C. Hodges, builder. At Sharpsburg, Ky. For A. J. Wyott, brick residence, cost $3,500; under way. For C. J. Ragan, brick residence, cost $4,500; under way. For W. Makin, frame residence, cost $3,500; under way. For B. F. Harriott, brick residence, cost $4,000; under way. Christian church building, frame, cost $2,000; under way. For W. O. Mize, brick residence, cost $5,000; under way; Geo. Rice, builder. For J. T. Day, frame residence, cost $4,500; under way.

Muir, Mich.—Nothing doing here, help is plentiful at low wages.

Architect Thos. Campbell reports; For Mr. O. Armstrong, two-story frame cottage, 24 by 48 feet, cost $1,500; under way. For Skating Rink Company, brick veneered building with truss roof, 40 by 120 feet, cost $2,500; projected. Also several small buildings, to the amount of about $2,000; under way.

Neillsville, Wis.—Building business is dull just now, no new buildings being started, although several brick blocks are talked of for next season.

Architect C. B. Bradshaw reports: For J. L. Gates, two-story frame dwelling, 20 by 30 feet, cost $1,000: projected. For Wm. Neverman, two-story veneered double dwelling, 30 by 30 feet, cost $2,000; under way. For Chas. Grow, one-and-a-half story frame dwelling, 24 by 40 feet, cost $1,200; under way. For Mr. F. D. Lindsay, two-story frame dwelling, 24 by 40 feet, cost $1,700; under way. For M. C. Ring, two-story frame dwelling, 20 by 30 feet, cost $1,000; under way. For Mr. B. Dangers, two-story frame dwelling, 18 by 36 feet, cost $800. For Mr. J. L. Gates, six tenements, one-and-a-half stories each, 16 by 26 feet, cost $400; under way. For Mr. J. K. Hoffman, one-story frame dwelling, 26 by 40 feet, cost $1,500; projected. For Mr. E. E. Crocker, two-story frame dwelling, 24 by 40 feet, cost $1,500; under way. For Mr. Jno. G. Klopf, two-story veneered store building, 25 by 80 feet, cost $3,000; under way.

New Orleans, La.—Building business is somewhat slow, as most people are giving their chief attention to the exposition.

Architect Thomas Sully reports: For Mrs. Isabella Braunlee, two-story frame residence, 36 by 86 feet, cost $7,000; under way. For N. D. Wallace. remodeling five brick stores into a hotel building, 150 by 100 feet, cost $8,500; under way. For Mrs. J. W. Coleman, two-story frame residence, 36 by 86 feet, cost $7,000; under way. For General Richart, three-story brick residence, 90 by 45 feet, cost $7,200; under way. For E. Augand, two-story brick store building, 53 by 75 feet, cost $6,500; under way.

North Springfield, Mo.—Outlook fair.

Architect A. P. Wright reports: For Mr. John Carson, a two-story brick store building, 21 by 90 feet, iron front, cost $3,300; under way; Greer & Co., builders. For Mr. E. W. Williams, one-story frame cottage, 30 by 36 feet, five rooms, cost $1,200; projected. For Mr. W. H. Howard, three-story brick store building, 22 by 90 feet, iron front, cost $5,900; projected. For Mr. W. P. Mussy, one-story frame cottage, 20 by 32 feet, four rooms, cost $700; under way. For Mr. M. Carson, one-story brick, 20 by 50 feet, cost $950; under way. The construction on "Rogers Academy," at Rogers, Ark., has been resumed after standing three months; the building will be completed about the first of August, 1885, if work continues without interruption.

Omaha, Neb.—Architect C. F. Driscoll reports: For School District, Columbus, Neb., two-story brick, 54 by 66 feet, cost $9,000; under way; James Pearsons, builder. For School District, North Bend, Neb., two-story brick building, 54 by 63 feet, cost $8,500; under way. For G. W. Frank, at Kearney, Neb., two-story frame dwelling, 34 by 34 feet, cost $4,000; under way. For John H. Erck, at Omaha, two-story and basement store building, 66 by 70 feet, cost $12,000; under way.

Ottumwa, Ia.—Architect Edward Clark reports: For Swedish Lutheran Society, one-story church building, 36 by 70 feet, brick and stone construction, galvanized iron, one-story with gallery, tower and spire, 75 feet high, cost of building complete $5,000; foundations finished. For T. D. Foster, frame chapel building, 32 by 54 feet, cost $3,200; under way.

Peoria, Ill.—Present condition not very good. Outlook for next season, fair.

Architect Ph. F. Mehler reports: For Mrs. Ballance, two-story and basement residence, 50 by 65 feet, Queen Anne style, basement of brick, above that frame, with slate roof, cost $10,000; under way; A. Bramble, builder. For Mr. J. S. Bell, two-story frame residence, 46 by 53 feet, brick basement, slate roof, heated by steam, cost $8,000; projected; contracts not let. For Mr. J. M. Rice, two story frame residence, 40 by 58 feet, brick basement, heated by steam, cost $6,000; projected; contracts not let. For Mr. H. Kreisman, two-story and basement brick residence, 46 by 56 feet, heated by furnace, cost $10,000; projected, contracts not let. For Mr. Denhard, at Washington, Ia., three-story frame building, 50 by 68 feet, brick basement, slate roof, heated by steam, cost $24,000; under way.

Randalia, Iowa.—This is a small place and is progressing slowly; but prospects for future improvements are good.

Architect Aug. Weitman reports: For Israel Rogers, two-story frame building, 44 by 100 feet, cost $3,000. For J. F. Randal, two-story frame building, 22 by 80 feet, cost $2,000.

Redfield, Minn.—Building improvements are going on with greater rapidity now than at any time in Redfield the past year. The elegant Bennet block has been enlarged to 75 feet front. Another handsome brick block will be constructed on the corner of Humboldt and Franklin avenues, on the ground now occupied by Briggs & Brown's hardware establishment. The building is to be 95 feet wide by 100 deep, solid brick walls, and will contain three elegantly finished stores.

Seymour, Ind.—Plenty of work going on. All mechanics are busy at fair wages.

Architect J. Balsley reports: For Aurora Furniture Co., three-story brick building, 60 by 100 feet, cost $5,000; under way. For Seymour Butter Dish Co., frame factory building, 60 by 200 feet, cost $3,000; under way. Also a number of small cottages under way.

Sioux City, Iowa.—Building business continues active, and prospects are good for fall season.

Architect G. G. Baldwin reports: For Mr. G. T. Westcott, two-story frame building, 47 by 62 feet, brick foundation, cost $9,000; projected, and plans under way; C. K. Poor, builder. For Mr. Wm. Krittle, two-story frame building, 30 by 44 feet, brick foundation and basement, cost $2,500; plans in office; contract not let.

Springfield, Ills.—Not as much being done as last year, and outlook not as good as at corresponding date last year.

Architect Geo. H. Helmle reports: For First M. E. Church society, at Grafton, Ills., stone church building, 80 by 120 feet, cost $60,000; under way; Wm. D. Richardson, builder. Schoolhouse, at Springfield, two-story brick building, 44 by 60 feet, four rooms, cost $8,500; under way; F. T. Willer, builder. Addition to school building, two-story brick, 28 by 40 feet, cost $3,500; under way; Jno. C. Beam, builder. Addition to school building, four rooms, two-story brick, 36 by 60 feet, cost $6,500; under way; D. P. Hopping, builder. For Mr. John Schoenneman, twelve-room dwelling, 48 by 54 feet, cost $12,000; under way; H. Bettenhaus, builder. For Messrs. Martheny & Mendenhall, store building, 40 by 60 feet, cost $8,000; under way; Buck & McKee, builders. For Mr. T. C. Dodds, two-story dwelling, 40 by 40 feet, eight rooms, cost $2,500; under way; D. P. Hopping, builder. For Mr. W. Ludlam, two-story dwelling, 40 by 38 feet, eight rooms, cost $3,000; projected. For Mr. J. H. Wells, two-story dwelling, 43 by 40 feet, eight rooms, cost $3,000; under way. For Mr. Z. T. McGinniss, two-story dwelling, 30 by 40 feet, seven rooms, cost $1,900; under way. For Mr. H. A. Bell, two-story dwelling, 30 by 50 feet, eight rooms, cost $3,000; projected. For Mr. James L. Hudson, brick addition, 18 by 24 feet, to two-story dwelling, cost $2,000; under way; James L. Powell, builder. For Mr. John T. Capps, two-story dwelling, 40 by 50 feet, eight rooms, cost $4,500; projected; H. Bettenhaus, builder.

Streator, Ills.—Outlook fair but not flattering. A number of buildings projected for next spring. Wages fair.

Architect F. S. Allen reports: For City of Streator, "Town Hall," 45 by 90 feet, two stories, brick and stone, tile roof, cost $10,000; projected. For F. S. Allen, two-story stone and brick residence, 32 by 40 feet, Van Papalendam tile roof, cost $6,500; under way. Christ's Church, at Joliet, Ills., stone walls and tile roof, cost $20,500; under way; Stage & Burlingame, builders. Catholic Church, at Streator, 53 by 122 feet, cost $15,000: just finished; H. H. Mufford, builder. M. E. Church parsonage, 28 by 48 feet, cost $3,000; just finished; H. Bay, builder. For Mr. James Sexton, a two-story frame house, 39 by 52 feet, cost $5,000; just finished; R. Myers, builder. For Mr. F. Holmes, two-story frame residence, 34 by 58 feet, cost $5,000; just finished.

St. Louis, Mo.—Business seems to be picking up in the architect's offices, still most of the plans now being prepared are for buildings projected for next spring. It is probable that the fall season will not be very active.

Architect A. P. Hyatt reports: For H. Vollman, at East St. Louis, Illinois, two-story frame store and dwelling, 26 by 74 feet, cost $3,000; to be finished by December 1st; H. Helfrich, builder.

Architect B. J. Goesse is building a convent at Cataway station, on the 'Frisco road, cost $25,000; six houses on St. Louis avenue, near Lindell avenue, two stories high, with mansard roof, $14,000; two stone fronts, on Grand avenue, $9,000; two-story brick, on Sullivan avenue, $8,000; several edifices on Cass avenue and in Jefferson City.

Architect Francis D. Lee, who is just completing Hoyle's building, on Fourth and Elm streets, has plans for a valuable row in the West End, is also beginning work on the Post Graduate School of Medicine, for which the basement is almost completed. It is on the corner of Jefferson and Lucas avenues. The building will be about 50 by 100 feet, two stories high, brick with terra cotta finish, cost $20,000. Its completion is expected early in the coming year.

Architects J. B. Legg & Co. have plans for an opera house and Odd Fellows' hall at California, Mo. The building will be of brick, three stories high, 50 by 100 feet in size, cost $10,000. Mr. Legg has just let the contract for its construction to a Mr. Bishop, of California. Cupples broom factory, on Sixth and Carr streets, is nearly completed. The machinery is now going in. Also just let the contract for a residence at Fayette, Mo., for J. C. Ferguson, to cost $10,500. Mr. Sherrick, of St. Louis, is the contractor. Also taking bids on a residence at Benton, for Henry B. Lawrence; two houses for Thomas Hoolan, on Grand avenue, near the water tower: a residence for Samuel Bucknell, East St. Louis; one for Captain Carter, Cote Brilliant, and has just finished plans for amusement pavillions, summer houses, etc., at the mineral springs near Flora, Ills., for C. E. Hitts, of this city.

Architect J. W. Herthel has plans and drawings for a new building to be erected for Isidor Bush, Second, between Clark avenue and Elm street, early next spring, Queen Anne style of architecture, finished in terra-cotta, and will cost about $14,000 when completed. Mr. Herthel is finishing up a residence for John M. Goode, Kirkwood, Mo., at a cost of $3,500; a house for T. W. Dorst, Carondelet, $3,000; three houses, P. Roeder, Dickson street, between Leffingwell and Garrison avenues, stone fronts with mansard roofs.

Architect H. W. Kirchner is completing the Concordia Turn Hall, on Second Carondelet avenue and Arsenal street. The building is 64 by 128 feet, three stories high, built of brick and stone, and cost about $16,000. It was commenced in June, and will be an ornament to the Southern part of the city. The main hall or auditorium is 70 by 100, and the gymnasium 56 by 62 feet.

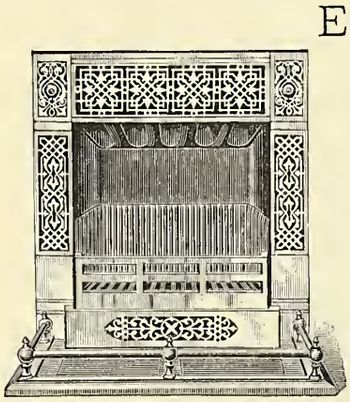
(*Continued on page xii.*)

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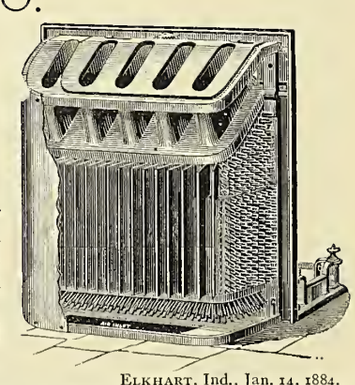
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, MINN., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

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Architect Isaac S. Taylor has plans for an $8,000 dwelling for A. J. Manny, on Magnolia and Mury avenues, and the building will be started at once. It will be two-and-one-half stories, and contain twelve rooms. Also completed the plans, and the foundations are prepared, for an addition to Mrs. Beers' hotel, on Grand avenue and Olive street. It will be 50 by 50 feet, five stories high, and cost $35,000.

Architects A. Beinke & Co. have let contracts for a row of houses on the southwest corner of Michigan and Lafayette avenues, for J. G. Zimmerer, to cost about $32,000. Also finishing a large four-story building, Tenth and Market, Deppe estate, $2,200; also residence Dr. Zuholski, Jefferson avenue and Locust street, $15,000, a row of houses on Leffingwell avenue, near Cass, Col. C. G. Stifel, $12,000.

Architects James Stewart & Co. are preparing plans for two large houses for James A. Gregory, on Channing avenue and Morgan street, to cost about $18,000. Also have plans for three houses, to cost $7,000 each, on Westminster Place, near Vandeventer; four dwellings for Dr. McLean on Fourteenth street, and four on Targee street.

Architect J. H McNamara is making sketches for some prominent buildings, to be located in the central portion of the city.

Architect Charles F. May is at work on plans for a twelve-room residence for Mr. J. G. Baker, on Pine, west of Grand avenue. It will be a two-story brick with terra cotta trimmings. Mr. May has also plans for two good-sized buildings for business purposes, but they will not be commenced before spring.

Architect H. E. Peipers has two double dwellings, with mansard roofs, for Mr. Koopman, cost $7,000. He is also furnishing plans and specifications for a store and dwelling-house, located on Sidney street, for Mr. A. Metz.

Architect S. B. Annan is building a twelve-room brick and terra cotta house, located west of Grand avenue.

Architect C. K. Ramsey is preparing plans for a large dwelling house to be built at Maryville, on the Narrow Gauge railroad.

Architect Thos. J. Furlong is busy making out plans specifications. He quite recently commenced work on a tenement flat, Cass avenue, to cost $10,000.

Architect John F. Mitchell is at present engaged in making plans for a house at Ferguson, Mo., and one at Aviston, Ill.

Architects George I. Barnett & Son are engaged on plans for seven eight-room houses on Lucas avenue, and have just completed plans for a number of flats to be erected on Grand avenue near Lindell.

Among the building permits recently issued are the following: Jno. Ebhardt, three two-story brick tenements, cost $6,500 each; P. Hursch, architect; F. Hermann, contractor. Board of Education, brick school house, 65 by 87 feet, cost about $17,000; O. J. Wilhelmi, architect; Grunewald & Wend, contractors. John Klute, three two-story and mansard dwellings, cost $4,000 each; Klute & Hillebraud, builders. A. Uhri, two-story ten-room brick dwelling, cost $6,000; A. Uhri, builder. Mrs. Koenig, three two-story brick tenements, cost $6,500; H. Rocklage, contractor. McCaul & Hasse, brick carriage factory, 95 by 109 feet, cost $20,000; A. Beinke & Co., architects; E. S. Hofman, contractor. James Corcoran, Jr., four brick dwellings, cost $13,000; Thos. Roach, architect and contractor. S. Zebrowiez, three two-story brick tenements, cost $7,200: Thos. Roach, contractor. Thos. Menton, double brick two-story store and dwelling, cost $5,300; O'Malley Bros., contractors. Henry Feurbach, three-story brick store and flats, cost $5,500; Henry Feurbach, contractor. Chas. Gulath, three brick stores and flats, two stories and mansard, cost $14,000; Chas. Wchking, contractor. St. Vincent's Parish, brick school house, two stories, 67 by 61 feet, twelve rooms.

St. Paul, Minn.—The plans for rebuilding the Union depot have been submitted to the inspector of public buildings and approved. The building is to have a frontage of 150 feet on Sibley street, and a depth of 175 feet. The new depot will cost, when completed, about $75,000. Plans have also been submitted and approved for a new warehouse, to be constructed between Waucota and Rosebel streets, cost $25,000. Frederick Driscoll will erect a two-story brick dwelling, on the south side of Summit avenue, between Walnut and Western avenues, cost $10,000. The Board of Education will build a two-story brick addition to the Adams school house, 59 by 58 feet, Eaton avenue between Colorado and Wood avenues, cost $14,143. Also a two-story brick school house, 82 by 77 feet, on the east side of Agate street, between Cayuga and Granite streets, cost $21,356, Architect W. H. Castner reports the following: A three-story double brick store and tenement for P. Schleimann, at Canada and Fourteenth streets, cost $12,000. Three two-story brick stores for P. R. McDownell, at Ohio and George streets, cost $10,000. A three-story and basement double brick store for Geo. Rochart, cost $12,000. A three-story cut stone store and office for Mr. Stinson, cost $8,000. Three frame houses on Goodrich avenue for A. P. Wilkes, cost $7,000. A frame dwelling for Capt. E. C. Bowen on Virginia avenue, cost $5,000. A double frame house on Walnut street for Chas. Easterly, cost $5,000. Frame dwelling for Chas. Englesbury on Marshall avenue, cost $3,000. Frame dwelling for W. H. Castner on Marshall avenue, to cost $2,000. Frame dwelling for Capt. E. Davis on Summit avenue, to cost $4,500. Frame dwelling on Cherokee street for E. P. Hall, to cost $2,500. Brick dwelling for R. P. McDonnell, West St. Paul, to cost $6,000. Improvements for Minnesota Terra Cotta Lumber Co. at Post Siding, to cost $3,000. Commodore Davidson is erecting an extensive block on Wabasha street, between Fourth and Fifth, eight stories high, with a frontage of 88 feet and a depth of 100. It will have 108 rooms in addition to the store rooms and offices on the first floor, and be known as the Grand Block; cost about $80,000; Harry G. Carter, architect. Mr. Carter is also making plans for a grand arcade, for Commodore Davidson, to extend from Fourth to Fifth street, near Robert. The Fourth street front will be 125 feet, and the entrance 55 feet six inches. The Fifth street front will be 250 feet, and the entrance 55 feet six inches. Robert street entrance will be 59 feet 9 inches. There will be a grand arch at each entrance, 26 feet wide; the building will be covered with an immense glass roof, designed so as to give perfect light to the numerous small stores that will occupy the arcade. Jacob Mainzer is erecting a frame residence on Oak street, 50 by 80 feet, to cost $12,000; after plans by F. H. Ganger. A two-story brick building for Mr. Schornstine on Dayton's Bluff, corner of Baits avenue and Hudson street, 35 by 70 feet, cost $10,000; plans by A. F. Ganger.

Architect George Bergmann reports the following: For N. Hardy, a three-story brick building, 68 by 84 feet, cost $8,000. For Mr. Schramm, a double house, 44 by 60 feet, cost $7,000. A three-story brick building for I. Stoltz, 22 by 76 feet, cost $7,000. A three-story brick building for Charley Horst, 40 by 44 feet, cost $12,000. A two-story stone building, brick veneered, for Mr. Miller, 50 by 75 feet, cost $8,500.

C. H. Johnston is architect for a residence for F. B. Howell, at the head of Robert street. It will be built of brick and wood, 40 by 60 feet, cost $10,000. A row of blocks for James Blaikie on Oakland street, to cost $15,000. A dwelling house for Mr. Rhodes on Summit avenue and Tenth street, 45 by 60 feet, to cost $14,000.

The contract for masonry, iron work, etc., on the new Court House, has been awarded to Messrs. Breen & Young, for $84,236. The next lowest bid was $88,548, made by Messrs. Agnew & Cox, of Chicago.

Among recent building permits are the following: F. V. and A. V. Heyderstaedt, one-story brick block of stores, northeast side of Broadway, between Eighth and Ninth, $5,000. E. A. Hendrickson, two-story frame block east side of Farrington, between Selby and Laurel avenues, $4,900. F. V. Heyderstaedt, one-story brick block of stores, 100 by 49 feet, on the east side of Broadway, between Eighth and Ninth streets, $5,000. Parker, Cook & Gowen, one-story frame roller skating rink, 60 by 180 feet, on the south side of Summit avenue, between Rice and Third streets, $6,000. F. B. Howell, two-story frame and brick-veneered frame dwelling, 48 by 56 feet, on the north side of Sherburne avenue, between Grant and Jackson streets, $10,000. T. W. Hunter, two-story frame double tenement, on Northeast side of Eden, between Exchange and Franklin streets, $5,500. Charles E. and A. J. Otis, alter two-story brick block, 82 by 58 feet, on the south side of West Third street, between St. Peter and Wabasha streets, $7,800.

Toledo, O.—Architect N. B. Bacon has: For D. R. Locke ("Nasby"), a five-story and basement brick warehouse, 30 by 114 feet, also building 40 by 90 feet, cost of both about $32,000, to be finished by March 1885.

Tiffin, O.—Outlook not flattering.

Architect F. K. Hewitt reports the following building now under way: Court House, of Berea sandstone, fire-proof, about ready for roof, cost $149,000; E. E. Meyers, architect: John Greenlee, builder. Third Ward School building, 79 by 79 feet, built of brick, cut stone and terra-cotta, cost $22,000, plastering; F. K. Hewitt, architect; W. H. Hollenberger, builder. Heidelburg College building, brick, with cut stone and terra-cotta trimmings, cost $46,500, excavating; Peters & Burns, architects, Dayton, O.; Chamberlain & King, builders. Flouring mills for McAdoo & Einsel, brick building, with cut stone and terra-cotta trimmings, cost $20,000; up to second story; work done by the day.

Wellsville, Mo.—Outlook not very flattering, although considerable building is being done in the surrounding country.

Architect J. J. Douglass reports: For W. H. Arnold a frame hotel building, 38 by 62 feet, cost $22,000; just completed. For F. White, two-story brick Opera House, 32 by 60 feet, cost $35,000; under way. For A. Davis, two-story brick business block, 20 by 60 feet, cost $25,000; nearly completed. First M. E. Church building, 32 by 50 feet, cost $3,000; about completed. Baptist Church building, one story, frame, 32 by 52 feet, cost $2,000; nearly completed.

West Bay City, Mich.—It is very quiet here, not much doing in building.

Architect D. P. Clark reports: For Mr. Michael Hagarty, two-story frame dwelling, 28 by 58 feet, cost $2,100; under way. E. J. Pfeifer, builder. For Mr. James Sweeney, one-story frame cottage, 27 by 40 feet, cost $1,400; under way. For Mr. D. B. Davis, one-and-a-half story frame cottage, 28 by 43 feet, cost $1,200; projected. For Mr. C. A. Bressler, at Bay City, block of threestores, 52 by 70 feet, brickfront, Ohio blue stone and terra-cotta, gravel roof, cost $6,000; under way; Harry Holmes, mason; Gregory & McClain, carpenters. At Saginaw M. E. Church, building, 70 by 104 feet, brick with stone trimmings, slate roof, open timbered finish, cost $15,000; projected. For Mr. Clarence O. Clark, at Medina, Ohio, one-and-a-half-story frame cottage, 26 by 32 feet, cost $1,000; under way; Wm. Leavitt, builder. For Owen Maloney, two-story frame dwelling, 28 by 53 feet, cost $2,200; under way. A number of small houses, costing from $400 to $800, are being erected.

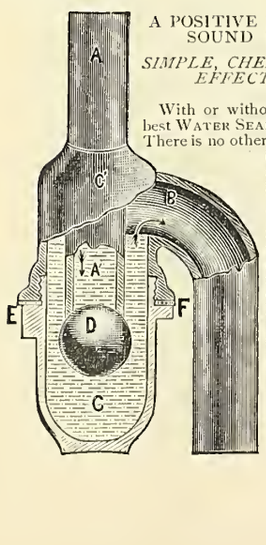
Winona, Minn.—Not much doing in building at present, and the outlook is not very promising, as probably no more large buildings will be started this season.

Architects C. G. Maybury & Son report: For Mr. Charles Miller, a two-story brick and stone store building, 60 by 100 feet, cost $12,000; underway; Kratz & Panzer builders. For Mr. R. D. Cone, a three-story, brick and stone, store building, 20 by 140 feet, cost $6,000; projected. For Messrs. Cummings & Vila, a two-story, brick and stone, store building, 35 by 100 feet, cost $10,000; projected. For Mr. Wm. Noonan, a two-story frame residence, 40 by 50 feet, cost $2,500; under way. For Mr. Wm. Hengstler, a two-story frame residence, 26 by 40 feet, cost $1,800; under way.

Architect Harry G. Carter, of St. Paul, has completed plans for an elegant new opera house, to be erected for B. H. Langley, Esq. It will be four stories in height, of pressed brick and cut stone, size 60 by 140 feet. The first floor will be fitted with stores, with a grand entrance to the opera house 20 by 40 feet. The total seating capacity of the house will be 1,124. The construction throughout will be of the most modern design, and every necessity for comfort and safety will be applied. The height of the ceiling will be 60 feet, and the main audience room will be 70 feet to the curtain line. The stage is 36 by 58. There are eight wide doors for exits on first floor, while the halcony and the gallery are also supplied with complete exits leading to the streets. The ventilation has been a special feature of the house, a new and well tested system having been adopted. The interior finish, curtains, draperies, scenes, etc., are very elaborate and will add much to the beauty of the place. The total cost of the building when completed will be $50,000. Plans for the foundation of the new Catholic convent, to be erected at the west end of the city, have been prepared by Mr. J. A. Seinfelder, the architect. The main building will be 227 feet long, with wings at each end 127 feet in length. The building will be brick with stone trimmings, three stories in height above the basement, with towers at each end and also one in the middle. It is expected to have the entire building completed in July of next year.

Yankton, Dak.—Architect E. A. Cobby reports the following: The three store buildings for Messrs. Dudley, Richie & Gross are nearing completion. One of the stores will be used by the above firm in connection with their present large hardware trade, the other two will be occupied by the Yankton postoffice, which will be fitted up with the Yale & Towne lock boxes and other attachments pertaining thereto, and when finished will give Yankton one of the finest postoffices in the West. Work was resumed on the pork packing house this month, so that it will be completed in time for the fall trade. This building is 50 by 150 feet, three stories, basement, all of brick. C. J. Ranstacher is putting up a new brick addition to his present large brewery. The addition is to be 60 by 40 feet, three stories high, and will contain an engine room and a complete set of latest improved machinery for beer making. Thornton, Moulton & Co., builders, and A. E. Cobby, superintendent.

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THE INLAND ARCHITECT AND BUILDER.

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THE

INLAND ARCHITECT AND BUILDER

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ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

PRICE $1.75 PER YEAR.

($2 FOR FOURTEEN MONTHS, IN ADVANCE.)

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THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

Index to advertisements in this number will be found on page 4 *Supplement*.

THE enthusiasm with which the call for a convention has been met outside Chicago has been supplemented by the efforts toward entertainment members of the profession in this city are making at the prospect of so large a number of visitors as are expected to be present at that time. The Chicago architects have set at work with a will to devise the best means for their entertainment, and that the visitors will be heartily welcomed is assured. Therefore, it will be with perfect assurance of a cordial welcome that the architects from distant cities will set out to visit Chicago, and between the visiting architects and their hosts the credit of organizing and attending the largest assemblage of the profession ever brought together in the West, if not in the United States, will be equally divided. All visiting architects will be notified, in advance, of such measures for their comfort as the reception committee may make and where the headquarters will be located, but any visitor who arrives without the necessary directions, should at once call on us, and as the convention will probably assemble at 11 A.M. of Wednesday, the 12th instant, it will be advisable for every visitor to report before that time. It is a most positive indication of the high position to which western architecture has reached when so emphatic a demand is made by the whole profession for a western organization to represent them and to which they can look for direction; one in which they can feel a fraternal union with each other, a joining of interests that will add more to their advancement both from a practical and æsthetical standpoint, than many years of individual work.

IN anticipation of the coming of a large number of architects from other cities, the Chicago architects met on the 23d ult., and appointed committees of reception, etc., that when their work is finished will leave little for the visitor to do, outside the object of his coming. The committee upon reception are seventeen in number, and are divided into subcommittees whose different duties all lie in the same direction, that of entertainment. One laudable work is the arrangement of a phamphlet giving in convenient form, a schedule of rates of charges of public conveyances, where the best sights are to be seen; the best way to see them, and a large fund of general information that will be valuable to the strangers.

Without the least infringing upon, and in fact with a careful avoidance of anything that might seem to infringe upon the prerogatives of the visitor, the committee, and also the programme committee, have outlined the order of convention sittings, and the hours for amusement and sight-seeing with the desire that nothing shall be left undone that can be perfected, to make the stay of visiting members of the profession most pleasurable and profitable. The meetings of the Chicago architects have been large and interesting, and from a social standpoint one value of an association has been shown, as at these meetings prominent architects who have practiced in Chicago for years and were perfectly familiar with each other by name, met for the first time, and this will be one of the benefits of the convention to every member of the profession, the social intercourse that will bind the architects of the country in closer relationship and harmony, while the interchange of professional views and the examination of each others work will broaden the scope of each architect, and lay the foundation of what will soon be a fact rather than a fancy, a distinctive style, that will be known as Western Architecture.

THERE are two questions that have long troubled and perplexed the profession, and toward the remedying of which the earliest attention of the Association will be directed, and those are commissions and competitions. The former will, of course, be ruled by the by-laws, but will have to be strongly supported by articles in the constitution, while the latter will call for the earnest thought and action of the entire convention. The abuses in the practice of either are too common and too uniform to need enumeration here, and the architects have a right to expect that now that an association, composed of the leading representatives of the profession, is to be formed, that these abuses will be regulated by laws that will be faithfully and thoroughly enforced. The attention of architects is especially called to this subject in advance that they may come with their minds formed ready to act upon the matter.

AN important question which should come before the architects of Chicago, and in other cities where the same conditions exist, is that of the contractor's indemnity bond. In Chicago the mason contractor is compelled to give bonds before he can secure the right to obstruct the street with building material, and, as the law now stands, this contractor cannot lift his bond until the building is practically completed, or the last obstruction removed, he being in this manner liable for the carpenter, the roofer or any of the contractors that come after him and deposit material on the street. It is for the architects to decide in what manner the law can be altered to equalize the responsibility. We think that the

responsibility should rest with the owner, or that the city should look to him for indemnity, and he in turn should be able to arrange with the contractors through the architect for his security. This law probably grew out of a former custom, and now much practiced in some sections, of letting the entire contract for a building to one general contractor, but in Chicago such contracts, especially on large structures, are rare, and the law should meet the requirements of the majority, and in this case should relieve the mason contractor of his present unjust responsibility.

THE eighteenth annual convention of the American Institute of Architects convened at Albany, New York, in the United States court-room, Wednesday, the 23rd ult., and remained in session two days. Twenty-two architects from abroad were present. Architect Thomas U. Walter, the president, presided, and was favored with a unanimous reëlection to that office. The principal matter brought before the convention was a proposed revision of the schedule of charges, and after lengthy discussion the old form was adopted with the exception of the erasure of the paragraphs referring to "plain warehouses and factories." Reports were received from the Baltimore, New York, Boston, Philadelphia, St. Louis and Indianapolis chapters of the Institute and were accepted, together with a report from the foreign secretary of correspondence. Papers were read by Henry H. Congdon, on "An Architectural Resume;" Russell Sturges, of New York, on "Old Art in Europe, a Help and a Hindrance to the New;" Rev. H. C. Wood, of Sharon, Pa., on "The Work and Aims of the International Institute for Preserving and Perfecting Weights and Measures;" Dr. Ogden Doremus, of New York, on "The Chemical Preservation of Building Materials." The following officers were elected for the coming year:

President, Thos. U. Walter, LL. D., of Philadelphia; treasurer, O. P. Hatfield, New York; secretary, Geo. C. Mason, Jr., of Newport, R. I.; board of trustees, H. M. Congdon, E. T. Littell, Napoelon Le Brun, A. J. Bloor; committee on publications, H. Hudson, of Holly, Charles Crapsey, of Cincinnati, N. Y., T. M. Clark, of Boston, J. McArthur, Jr., of Philadelphia; committee on education, Alfred Stone, of Providence, Henry Van Brunt, of Boston, Professor N. Clifford Ricker, of Champaign, Ill., Professor W. R. Ware, of New York, T. M. Clark, of Boston; secretary of foreign correspondence, W. L. B. Jenney, of Chicago.

Among other reports the board of trustees recommended that a per capita tax of $1.50 be imposed upon each fellow and associate, to defray the renting expense of the headquarters of the Institute in the Bryant Block, New York. The Institute were the guests of the Albany chapter, and the manner in which they entertained the visitors was highly creditable to the gentlemen composing that body. That Mr. Walter has been returned to the chair which he has filled with so much ability and honor, is a matter for general congratulation, but it is greatly to be regretted that the convention was attended by no architects west of Cleveland and Cincinnati.

THE English Architectural Association has issued its annual report for the years 1884-5, and a very satisfactory one it is, the number of members being about 1,000. According to the *Builders' Weekly Reporter* of London, so rapidly have the members increased, that the executive consider "that the time has arrived when steps should be taken towards meeting the difficulty" of increased labor devolving upon them; and a resolution has been passed "which it is felt will commend itself" to every member—viz. that of "rating the annual sum of £20 to be expended at the discretion of the senior secretary for the time being." This, we presume, is to provide additional assistance when required, and the amount cannot be considered in any way extravagant. That journal also says: "We are pleased to learn that the 'library continues to be of great use,' and that it 'has been enlarged during the past session by various donations and purchases.'" From the report before us it appears that the Color Class has not been so well attended as could be wished, but it is gratifying to learn, from the report of Messrs. Turner and Blashill, "who lectured in connection with the Classes of Design and Construction, shows that the interest in these lectures is still maintained. Mr. Tarver has kindly consented to repeat his course during the coming session; and the services of Mr. Lovegrove have been secured to deliver the course on Construction in place of Mr. Blashill, who this year retires. The best thanks of the Architectural Association are due to him for his most valuable and zealous services." The report refers with pleasure to the "distinguished position taken by one of its past presidents, Mr. Aston Webb, in conjunction with Mr. Ingress Bell, in the recent competition for the new Admiralty and War Offices." Altogether the prospects of the Architectural Association for the ensuing session are in every way encouraging.

SEWERAGE and water supply are receiving the earnest attention of the Citizens' Association of Chicago, and they have issued the following offer for the best system by which the drainage, sewerage and water supply can be controlled in Chicago:

The Citizens' Associatiation of Chicago offers a prize of $500 for the best practical essay on the main drainage, sewerage, and water supply system of Chicago and its vicinity. It is desired that the essays shall discuss the subject in view of the present condition of those systems, and shall consider the best method of providing for the immediate and also the future requirements of the population in those respects. The question should be considered in connection with the Chicago River and the slips, the Desplaines River and the Ogden ditch, the canal and the Fullerton avenue conduit, and should have special reference to a mode of securing an abundant supply of pure water and of providing for the disposition of the sewerage. All suggestions of plans for carrying into effect the views of the writers should have due regard both to efficiency and economy, and should be accompanied by descriptive drawings so far as necessary to make them easily understood. The subject should embrace the City of Chicago and such of its suburbs as may properly use the same means of obtaining water and the same systems or lines of drainage. The competing essays must be delivered to the Secretary of the association on or before April 1, 1885, and be signed by some designation corresponding with the mark upon a sealed envelope which shall contain the name and address of the writer. Three gentlemen shall be selected by the association to act as judges, and their names will be made public as soon as they have signified their willingness to act. All essays are to be considered the property of the association for purposes of publication, but the envelopes containing the names of the writers will be destroyed without being opened excepting that bearing the designation of the successful essay.

John L. Thompson, President.

The value of this association to the City of Chicago is becoming more marked each year, as gentlemen of the highest intelligence and practical ability are active members, and are continually giving their valuable time and thought to the solution of those problems that daily come before the citizen in the form of a pressing necessity or an economical measure.

IN no field of commerce is the rule of "cheap prices, cheap goods" so generally true as in the purchasing of building material; and because of this, property that should remain substantial and unimpaired for many years rapidly depreciates because the owner at the start sought to cheapen his building by giving a low price and expecting to obtain good work and good material. The owner has probably been educated to this by first buying his lot. He finds that real estate in a certain neighborhood is of a certain supposed value, that value being the price paid in the more recent purchases, and if he succeeds in obtaining his ground for a less figure he has made a good bargain, and his ground is worth just as much as though he had paid a larger sum. He goes to his architect and tries to secure "cheap" professional services. Such can be had, but he has now entered a field where values are unchangeable. It is impossible to get good services cheap, but he does not know it, or wilfully closes his eyes to the fact, and the result is the business man who would not dream of submitting an important law case to a "cheap" lawyer, or trusting himself in the hands of a "cheap" physician, will consider the less he pays his architect the better off he is. He insists upon "cheap" contracts, and perhaps the contractors, after figuring upon the lowest "living" basis, are requested to re-figure, and the result is a lot of contracts let for less than cost and a building that is "skimped" in every place it is possible, and in the

end the owner receives a building that in a few years will be practically worthless. It seems to us that architects can do much to regulate all this by educating the building public. They should deal with none but reliable contractors, and feel perfectly free to give a contract to the most capable builder, instead of the lowest bidder, where the circumstances warrant it. This is a professional question that should receive the early attention of architects.

OFFICE hours are more necessary to be observed than almost any other rule among architects. The architect who, perhaps, has a partner or a capable head clerk can be indifferent to the hours when he may be found in his office, but he who has a small practice and no efficient man to take his place, while absent, should have stated hours when he is sure to be "at home" to the calls of clients and contractors. "It is rather discouraging," as a discomfited would-be client remarked of a well known architect the other day, "to call on an architect and find him 'out,' and have a young draughtsman peer from the obscurity of a high collar and a draughting board and say, 'Don't know,' to an inquiry regarding the time when his principal can be seen." An architect must be popular, indeed, who will be likely to have a client call many times with such discouraging results.

The Development of New Phases of the Fine Arts in America.

BY P. B. WIGHT.

Part I.

THERE is perhaps as much occasion for surprise as congratulation to behold the prevailing tendency, or at least striving, to give an artistic expression to nearly everything that is made and done at the present day. I say "striving," for it must be admitted that failure as often attends the well intended effort as success. This is more especially the case in America than in Europe.

I will confine myself, mainly, to the condition of art at home, and some of the causes that have led to it, only referring to those influences from abroad which have had a direct bearing upon it. Neither will I refer to the great period of art in the fourteenth and fifteenth centuries, except in so far as the study of its productions led to a most important modern movement in England, which has been the leaven of all good art work to the present time.

It is the present and the immediate past which mainly concerns us, and it is in our country that we today see the best illustration of the strivings of *art producers* of all classes and a popular demand for good art work, be it of whatsoever kind. And furthermore, it can safely be said that the fine arts, whether they be illustrated in statues, paintings, buildings, music, the drama, dress, decoration or furniture, with all their accessories, which are almost infinite, are from the commercial point of view today *on a paying basis*, a statement which could not have been made ten years ago.

But the fine arts of today are not the fine arts of thirty years ago, while half a century ago what little of good or valuable art work was produced was isolated and sporadic. A modern work of art was then a curiosity, and a curiosity only to the very few who had any capacity at all to appreciate it. The people then had no art and no one to tell them what it was. To be sure there were painters and sculptors and architects, but the Academy of Design had to fill out its membership with sign and steamboat painters.

The painters who painted on canvas with oil colors were called "artists." There were a dozen in England and three or four in America, whose names are remembered. There were three or four altogether whose names are now great. There were sculptors in Italy only, and they were mostly copyists. There was also a scattering few in France. There were architects then in England, not one of whom is now celebrated, and there were architects in America, but only for public buildings; and even many public buildings had to be built without architects. Ninety years ago Congress tried to have the capitol built by a physician, whose design was adopted and who essayed to build it, but did not. Only three architects who built in America fifty years ago may be called great. They are Latrobe, Strickland and the unknown Frenchman who designed the city hall of New York. Only three painters of that period deserve to be remembered: Stuart, Trumbull, and perhaps West, whose reputation, however, was made in England, where he lived nearly all his life. Of sculptors, we had none. The few works of such character attached to public buildings were made by foreigners.

Of music then, we produced none; but Europe had recognized Mozart while he lived and Beethoven when he was dead, and Mendelssohn was becomming a brilliant star in the firmament. Handel and Bach were the admired of the virtuosi but the people knew them not. Twenty more great composers had lived only for posterity and they are now unearthed and known. But the music that the world could not appreciate or understand is happily preserved. It has this advantage over the other arts, that it may live in a pigeon-hole or trunk until it is wanted, and then may make the world happy forever.

The American drama of fifty years ago was a poor copy of the conventional English drama. It had no hold upon the popular mind, but as a diversion, and often a stolen one, for it was under the ban of the Puritan church and regarded as the work of the devil. Shakespeare's plays were then regarded as curiosities, and the great comedies of the last century were not yet purged of their vulgarities and smut. Beyond this there was nothing produced worth the name of "fine art." Dress, decoration and furniture, those lichen growths of civilization which cling to the personality of rich and poor from the cradle to the grave, were as far removed from all artistic influences as it was possible for them to be. They were to a certain extent subjects of fashion, but fashions then did not change so frequently as they do now. Dress was simply grotesque and often guady, though at times there was good sense shown in the dress of men. Of decoration there was none. Of furniture there was much of a substantial and then old fashioned kind in use, such as our modern "æsthetes" now crave for and call bric-a-brac, but it was never artistically designed. The only good quality that recommended it then (as it is also the only one we see in it now) was its freedom from extravagances of contortion and coarse decoration, badly imitated from the French, with which all furniture manufacture was infected forty years ago, and which continued through various developments until about fifteen years ago, when a few sensible people could not stand it any longer.

Fifty years ago the only foreign influence felt in the art of sculpture in the United States, came from France and Italy. But it produced little to speak of. We derived some inspiration from a few English paintings which were then brought over, engravings of the works of contemporaneous English artists (a few after Turner just having appeared), and many bad copies from the most famous but least valuable paintings of the old masters of Italy. There was no foreign influence upon our architecture, and a few English architects, without reputation, had then arrived in this country; while our house carpenters, who were then builders, were vainly trying to fish architectural designs from the books of Batty Langley and the illustrated descriptions of Walpole's Strawberry Hill, or Beckford's Fonthill Abbey, whence arose the American style of architecture known as Carpenters' Gothic. From Stewart's Athens, then the most valuable work on architecture that had been published, they evolved the American classic styles, practically illustrated in constructions of scantlings and boards, lath and plaster.

When, in those times, the ancient furniture began to be discarded, it was replaced by the so-called French furniture, the principal element in whose design consisted in abolishing every straight line which had formerly existed in the old style of work, and fashioning the wood of which it was made, so that a material only known as having a straight grain should be cut into every sort of curvature that human ingenuity could conceive of, and covered at every accessible point with carvings made with more or less clumsiness, that represented nothing known in the whole floral or vegetable creation, and which no one ever took enough interest in to find out what they represented. All known decoration of that day consisted of carpets, curtains and chair coverings. The only color for these materials allowed by true respectability was dark crimson. Lace curtains were used for all windows, of quality to suit the means of the buyer. All window cornices were gilded. The poor and those of medium abilities used stamped metal, the rich used putty ornaments gilded solid. It was only the rich who used heavy curtains, and it is safe to say that for twenty-five years the only material and color that could be used by a thoroughly respectable well-to-do man in the curtains and chair coverings of his best parlor was crimson satin damask. His best carpets if of moquette, were always in the most delicate pearls, blues and whites, covered with sprays of bright colored flowers. The wood-work of his furniture and the doors of his rooms were of rosewood or some stained wood to imitate it; the remaining wood-work of the room was always painted pure white. The walls were painted French gray or salmon color, and the mantel piece was either of white marble or black. A mirror was placed over the mantel and another between the two windows with a white marble shelf under it (always white), and the mirror frames and cornices over the curtains were gilded all over. A few family portraits, of enormous size and painted by a neighboring

"portrait" painter, who had never been known to paint anything else, completed the furnishing.

I have taken pains to draw this description of a respectable man's best room, and in as few words as possible, for the reason that even though the dictates of fashion and respectability kept it so long in vogue, it is such a one as we can rarely find today. Therefore, we may say that in those days there was no fine art in the household, except that which came there accidentally. There was no call for it. If there had been it would not have come.

How marked the contrast with what we see today in the household, in the shops, on the street, no less than in public and private collections of works of art, made because they are good and beautiful. For, as it has been said, the fine arts today are on a paying basis, and what can be said that will more fully illustrate the state of the times? A painter can sell his pictures if they are worth anything. A good painter can find appreciative patrons. An artist may even be called to decorate a house and a sculptor to carve for a building, though this is still rarely the case. Now you can get a professed sign painter to paint a really artistic sign. Upholsterers select goods for the beauty and appropriateness of their designs and colorings. Cabinet makers all advertise "art furniture," even though they do not always have it. Those who supply and those who demand, try, at least, to be guided by artistic impulses. But the best indication of all is that today a good painting placed in any public exhibition can be sold on its merits without regard to the previous reputation of the artist. This has been abundantly illustrated in recent picture exhibitions in New York, notably the last water color exhibition and that of the National Academy of Design, where the sales of paintings amounted to over $40,000.

But for all this we have not found Utopia. There is plenty of bad art as well as good art, and every grade between the two. Bad art is worse than no art, and we still have plenty of it. Art is a word that is much traduced. Like charity it covers a multitude of sins, and bad art will always flourish as long as popular opinion allows it to. It feeds on popular ignorance, and it will vanish only just so fast as popular enlightenment increases. We have at present only to deal with that art which is good or passably good. For while, in the times of which we have spoken, whatever there was of fine art was mainly bad, today it is mainly good, and there must be some reason for it. Its growth has had little or no help from that other growth of knowledge in the mechanic and industrial arts which has been so rapid. This has only put the means of becoming patrons of art, whether in a large or small way, in the hands of more persons. But the good art of today has been not the result of accident, but to a great extent *of a determined effort*. It has had no authoritative exposition of principles on which it might be based, but is the result of a fundamental idea which began to take root and grow thirty years ago, from the teaching and example of a few earnest enthusiasts. I say no authoritative exposition, because no authoritative body which might have promulgated it has done so. On the contrary it has crept into the great art organizations, slowly and naturally, just as it has permeated the body politic.

The fundamental *idea* which is the basis of all good art is that *there can be no beauty without truth*, and the effort to promulgate this idea has been mainly individual effort, aided by some good examples.

I have referred to authoritative bodies without naming them. They are, in the two countries most nearly related to us in art matters, the *Academie des Beaux Arts* of France, which is a department of the French Academy, and the *Royal Academy* of England. Their only counterpart in this country, authoritative not on account of government support, but by reason of its comparative antiquity and stability, is the National Academy of Design, now in its fifty-ninth year. Notwithstanding the high character of the first, and the conservative respectability of the second, they have done nothing to advance the so-called *æsthetic* movement in England and America. They have been only silent spectators of the march of events, and occasional recorders of its progress. All three are but the current reflex of the opinions of the professed artists of the countries in which they exist. The æsthetic movement — I will continue to use this word, though now so much degraded through misuse — has gone on side by side with these organizations. It has been mainly due, as I have said, to individual effort, and it has sometimes taken on a form of organization. But these organizations have not been strong, for the very reason that their promoters have always been opposed to setting up anything like state authority in matters pertaining to art. I have therefore used the words "determined effort" in contradistinction to the organized authority of the great art societies. And this effort has been almost always stronger because it was individual. It has always been the effort of enthusiasts who loved art for its own sake, and truth above all selfish ends. They were the Peter-the-Hermits of a new crusade, whether they were architects, painters, poets or preachers, and by the latter I mean those who helped the movement by the pen and the printing press as well as the power of speech.

This movement, once small in its beginnings, now great in its results, made its firmest stand in England. Elsewhere on the continent it had but few advocates. In Antwerp the late Baron Leys, the painter, was almost its only exponent. To him the world is indebted for Alma Tadema and other pupils of less note, and Tadema is now a full-fledged Royal Academician. In France it found its greatest of all exponents in the late Viollet Le Duc, architect, archæologist and writer, and Trélat, master of the Ecole Centrate, a private establishment in Paris.

In England it is claimed by some to have commenced with the first attempts to revive Gothic architecture. But as these were made only in a way calculated to bring it into ridicule and contempt (vid. Beckford's attempt to build Fonthill Abbey and Horace Walpole's freaks at Strawberry Hill), I think that the first real Gothic revival commenced with the high-church party, which sought to revive Christian architecture in connection with the restoration of the ancient ritual of the church. From this arose the Cambridge-Camden and other societies, which, being composed of clergymen and architects, all of them scholars, maintained that the only inspiration for Christian architecture was to be found in the church buildings of the thirteenth century. After them followed a long line of Gothic enthusiasts, and the rapid publication of illustrated books by the ecclesiastical and archæological societies which were then formed. Private enterprises in the same direction soon put it within the reach of all who were studiously inclined, both in England and America, to revel in the hidden treasures of art. It found numerous exponents in the young architects of the time, who soon proclaimed that Gothic architecture, of the best type, was adapted to civil as well ecclesiastical buildings, and they put their theory into practice. From them came many distinguished lights in the profession, foremost of whom were Sir Thomas Deane, William Burges, George Edmond Street and Alfred Waterhouse — all but the last are now dead. Burges studied the thirteenth century architecture of France, the purest, truest and best that ever existed. Street drew his inspiration from the early architecture of England and the old Gothic of Verona, Florence and Venice, concerning the last of which he published the book, so much read now by students, called "Brick and Marble of the Middle Ages." Waterhouse built the most successful civil building in England, the Manchester Assize Courts, and afterwards the great town hall of the same city. Today he is the foremost architect in England. Street commenced, but did not live to finish, the most important modern building in London, the New Law Courts.

John Ruskin, the apostle and highest authority of the new movement in England and America, commenced his writings with the "Seven Lamps of Architecture," after the Gothic architects had commenced the revival. The architects therefore never looked up to Ruskin with the esteem which should attach to a leader, for they regarded themselves as the Simon-pure revivalists. They always treated him with the quiet respect which they could have for a well intentioned amateur wanting the technical knowledge of their profession, but presuming to go to the depths of constructions which he did not fully understand, to elucidate the principles which should guide them. But he had some followers in England, and among them Sir Thomas Deane, who may be regarded as the exponent of the Ruskin idea of architecture. It was he who designed and built the Oxford Museum, in which the first attempt was made on any extensive scale to introduce realistic carving in stone. It was in this building that Ruskin brought into prominent light Thomas Woolner, now one of England's greatest sculptors, a firm adherent to the realistic school, and its chief exponent in the art of sculpture.

But the most prominent effort of the realists, outside of the revival of architecture, was made by another body of men, who were, however, in accord with it. These men were painters and poets, with Woolner alone to represent sculpture. They found their inspiration in the works of the early Italian masters: Titian, Tintoretto, Georgione, Fra Angelico, and Raphael in the earliest part of his career. The leading spirits of the movement were Dante Gabriel Rossetti, Holman Hunt, John Everett, Millais, Burne Jones, and William Morris. They banded themselves together to make common cause against the falsities and conventionalities of the modern school of English art, and called themselves the Pre-Raphaelite Brotherhood. It was an unfortunate name, but it was only intended to express the fact that their starting point was where the predecessors of Raphael had left their art. The name was seized upon by all the art writers of the time who were not in affiliation with them, and tried to make it a by-word and a reproach. But the disciples of the new school gloried in it. They maintained that the great masters, whose names were as familiar to everyone as household words, had in Raphael's time departed from the true purposes of all great art; that they had departed too far from the strict truth of nature, and had in its place substituted mannerism and conventionality both in composition and color. It was a bold undertaking to criticise Raphael, Leonardo, Correggio, Angelo, and Claude, but it was bolder still for comparatively unknown men to wage war against

the great reputations and accepted mannerisms of their contemporaries. But how well they did it history has already told. It was not so much by their protests and preaching as by their work, for the public was naturally stirred by curiosity to see what these men could do. Their enemies among the host of shallow art critics, who had the public ear, did not fail to advertise them well in this respect.

Their acknowledged leader was Rossetti, a born poet as well as a painter, whose written works are now too well known to need further mention. But his paintings and drawings were known only to a small circle of friends, for he never painted to sell and did not publicly exhibit. He became known to the public mainly through book illustrations, in which, in common with Holman Hunt and Millais, the manner of these men in drawing at least could be readily studied. William Morris, in his poems, had just then revived the Arthurian legend, and thus given a new field for the exercise of the imagination in a new and truly poetical domain which had never before been explored. But while the others were drawing illustrations for his works, he threw down the pen as bodly as he had taken it up, and turned his attention to that field of art which has since been known as household art. In company with several equally enthusiastic associates he proposed to manufacture and sell everything required to make a house beautiful to live in, because those who wanted such things could not buy them elsewhere. The formation of the firm of Morris, Marshall, Faulkner & Co., was the result, and the business is still carried on under the name of Morris & Co. Furniture, stained glass, wall papers, upholstery goods, carpets and rugs, comprised but a part of the articles produced. Everything made and sold was correct in form and beautiful in execution, according to the principles maintained by the revivalists. All the artists of the Brotherhood contributed toward the decoration of what was made. The business was started without the expectation of profit, without advertisements and without even a sign. But its success was immense. It is safe to say that this shop has been the nucleus of the whole modern development of æstheticism in its relations to immediate human wants.

The new school had its advocates, and found in Wm. M. Rossetti, brother of the artist, and already a prominent art critic, a staunch supporter, while Ruskin put in his thunder strokes as long as his vitality lasted. It had its adherents, too, of which I could mention a score or more; some professedly so, others silently marching in the new path which had been made clear. I don't propose to dwell at length upon the career of these men, whose history is now well known. It is of more interest to us to pass on and find how and when the movement got a foothold in our own country. Suffice it to say, before passing on to the American movement, that we now see Frederic Leighton, one of its coadjutors, in the chair of the Royal Academy. When, two years ago, the original drawings of William Burges were sold at public auction in London by order of his executors, I found myself bidding in vain on lot after lot in common with others of his admirers who wanted some reminiscences of his own handiwork, when I was told it was of no use, for by order of Sir Frederick Leighton they were being bought for the Royal Academy schools. One volume was ultimately procured for a New York architect.

But, notwithstanding the personal success of the immediate members of this body, the warfare of misrepresentation has been waged against them unceasingly, and it takes a bold heart even now, in England, to profess adherence to the school. As an organization, it long since ceased to exist. There is no necessity for it any longer, for all that it professed to do is accomplished.

It may interest us, however, to observe how some causes, among others more or less direct, were influencing the growth of the new idea in our own country; and it is remarkable how small and apparently insignificant they were. As nothing circulates so fast as printed books, everything printed on this subject was read with avidity by a large class of educated Americans, and especially the writings of Ruskin. But we had little or nothing to show what was meant by its advocates except a few book illustrations. Ruskin's "Elements of Drawing" had been much sought for, and by its help many young students of art and a few professed artists had learned how to discard the old conventional methods for learning how to draw, and acquired some facility in drawing from nature with fidelity to the truths which she revealed to us, when our eyes were properly opened to receive them. Already there were small bodies of men and women who stood ready, if occasion should offer, to take their part in advocating an emancipation from the old tenets of the prevalent schools of art. Many of the architects, influenced by what they had seen abroad, had commenced to make new and original designs; but no concerted movement had ever been made, and up to the year 1860 any one who wanted a sensible piece of furniture, a handsome carpet, or anything worth having to decorate a house, had to go without it; and if he wanted a good picture he would still have to go to an academician of the National Academy, for it must be admitted that even then all the best were *in* the Academy.

Landscape Architecture.

BY T. HAWKES, LANDSCAPE ARCHITECT.

LANDSCAPE architecture is so allied with architecture, its aims and object so connected, that the study and practice of it should be encouraged by the profession whose works it seeks to beautify and ennoble. In comparatively new countries it has not yet arrived at the sphere of usefulness that awaits it. The people have had to seek out the natural beauties and scenery of their country and have not had the desire of bringing to their own homes those charms of beautiful out-door surroundings, that gratify the educated eye and mind. Steadily this desire is created, and among the wealthy and refined classes we see this feeling rapidly developing.

The throngs who find pleasure in the public parks testify that that desire has taken deep root, and that a love of the beautiful in nature permeates the masses. In this sense to administer to the pleasure and relaxation of the people is fulfilling a useful task. The work of the landscape architect has a claim to share with the sister arts, its part in elevating and refining mankind. In a beautiful park, with its vistas constantly opening up new beauties, its glimpses of shining water, its various foliage, the beauties of nature laid before us in their most attractive form, we see the results of a study of the *art* of nature and a harmonious picture is produced, a living picture pleasant to dwell upon for all time. But this picture must be the work of ONE mind. In few instances have there been successful results obtained by two or more artists painting the same picture. What is the result when some amateur attempts this task?

Dealing with houses, architecture and landscape architecture should go hand in hand. Modern houses are often artistically built, with every regard to the comfort and taste of their occupants, but how wofully wanting are they in outdoor surroundings. The house and grounds should be designed at the same time. In that case fuller scope can be given to the requirements of both, and oftentimes considerable expense avoided. An injudicious site of a house often baffles the future attempts to beautify the grounds. The question of fixing the site of a house is a very important one. The aspects and views must be studied; the inclination and level of the ground considered in relation to the arrangement of parterres and terraces. Instances frequently occur where the doctor is called in so late that the disease is too deeply rooted to be cured, or the cost of the operation is very great. The treatment of the grounds should always be subordinate to the style of the building. In dealing with the grounds of old houses many varied modes of treatment are required from the different surroundings, but the object should be to ennoble and dignify the building. A consideration after fixing the site for house and stables is to select the line for the carriage drives. These should be made to enter the grounds where there is some special object for so doing and at the most convenient place. The point to be selected should be chosen, likewise, for its natural advantages, such as entering between any fine trees, or at some level or other defined point, and proceeding by easy gradients and natural curves towards the house, choosing such a route as will show the best points of the grounds and best views of the house. The drives should be so arranged that the south and west fronts are not overlooked by approaching visitors. The court-yard should generally be on the north front. The stables should be at a convenient distance from the house and connected by a road merging into a carriage drive. A glimpse of the stables from the carriage drive is desirable. The road from stable to house should be made on a slight ascent. All carriage drives should be drained with tile pipes and catchpits; a properly constructed road is the most *economical* in the long run.

Next, the pleasure grounds around the house. In many cases a terrace with a walk round the south and west fronts is the most desirable treatment, but this greatly depends upon the style of house and surroundings. Show nature in the park, but around the home of law and order make nature follow the same course. From the terrace flights of steps from the upper walk descend to the parterres, these should be on a hanging level so that a design for flower beds can be laid out. This, from the upper terrace walk, the veranda and windows, forms an elegant display, and many artistic effects can be produced. This treatment gives an air of repose and grandeur to the house, but the landscape architect is called upon to arrange ground for houses varying so much in size and style that no fixed rule can be laid down.

A lawn tennis ground should be made near the house, this can generally be arranged on a parterre, without interfering with the design; a view should be had from the terrace and there must be an ample land margin around the courts. In many places a hard, dry tennis ground is also required, so as to be available in winter and after wet weather; it requires great care, however, to construct it so that it will speedily get quite dry after rain. The walks about the grounds should all be made with an object; either to carry out a set design or to lead to definite points with graceful natural curves. Advantage should be taken of any fine trees as points to lead or to skirt. In arranging a terrace great effect can be

produced by centering it with two fine trees, making artificial lines lead to natural points. A walk may be made from pleasure grounds through shrubbery, but it must not be without some object, such as to see some distant points of interest, to obtain a glimpse of a lake or river, or to conduct to a summer house, or pavilion; in doing this it should be so arranged that fresh views disclose themselves as it progresses. Never show all your beauties at once. In returning to the house regard should be had to obtaining the best views of it. The walks also should be well drained. A walk is necessary from house to stables and this should, though direct, be made attractive. From this walk, a branch one should go on to the kitchen garden, which, though out of sight from the house, should be a pleasant feature of the estate; it should be within easy reach of the house and adjacent to the stable, homestead and orchard.

The gardener's cottage may, with advantage, be placed at an angle of north wall, so that he can command a view of the whole of the gardens and its buildings. The simplest style of green-house is the best, and most soils can be made available for vegetable produce by judicious treatment.

A view of water from the terrace and windows has a charming effect, and a sheet of water can often be made at slight expense where there is a ravine or small stream running through the estate, by constructing a proper damhead with outlet and overflow, and a pretty effect can be produced by bringing this over natural rockery. Where no stream exists, and the sub soil has not the capacity for holding water, a lake can be made by excavating the ground and puddling the bottom and slopes with clay (the excavation can be used in mounding, making long natural slopes, etc.), and the supply can generally be got by connecting surface drains from drive paths and grounds and overflow from tanks at house, etc. The lake being made water-tight and once filled, the evaporation will be more than compensated for by the rainfall. A sheet of water in the right place is an agreeable addition to the scenery, but it requires well doing—"the letting out of waters, etc."

In some cases the removal of certain trees will open out a fine prospect. Apropos of cutting down trees, it is much easier to cut them down than make them grow. Except in certain cases, consider well before you sacrifice a tree and don't do it without a potent reason. Oftentimes the axe should be employed vigorously. You cannot rear three children on the food for one. Trees too thickly planted cannot thrive, they not only become sickly but they make their larger companions become so likewise. Many fine trees are disfigured by having others crowding into their tops. The question of planting is of considerable importance. Without much thought trees and shrubs are often planted indiscriminately. Crowded together the poor things cannot thrive and are of no use for transplanting. Younger and more vigorous trees will soon outgrow them. Trees planted thickly in groups should be thinned out when they are fairly growing and require more room. Regard should be had to the future growth of trees and the different foliage.

Shrub planting in plantations should be more adopted; it gives to pleasure grounds a finished and well cared for appearance, and with a good mixture of flowering and other deciduous shrubs and evergreens a pleasing effect can be produced. Specimen shrubs should be prominently set forth, having due regard to their after growth. The location and description of planting is one for the landscape architect and his directions should be carefully followed.

Some of these remarks as to the grounds of private residences will apply to public buildings and grounds, but there a different course is adopted; the requirements are for the many. A zoological garden, a public park and a public square, each require a different mode of treatment as much so as do the grounds of a cemetery and a hotel. I have not attempted to write about the elaborate Italian gardens, with their terrace walling bastions, balustrading, piers, tazzas and vases, their pavilions, fountains and statuary; all this, however, pertains to the landscape gardener's work.

Artistic taste is being now brought to bear on articles of every day use, and surely it should be employed upon our out-door surroundings. "A thing of beauty is a joy forever." The art of landscape gardening should apply to small matters as well as greater ones. An artistically shaped flower bed in a limited garden may be as much a source of pleasure to its owner as a gorgeous design on a grand parterre which does not belong to him, and it costs no more to fill with flowers than a vulgar one. The study of nature and the love of the beautiful in art are steadily growing — the love of flowers and trees has a most humanizing influence — and it should be the care and pleasure of those who follow this profession to help to stimulate this healthy feeling, remembering the influence their works may have.

THE INLAND ARCHITECT AND BUILDER, published in Chicago, competent critics pronounce the handsomest paper of its class in the country.—*The Newsman*, Boston, Mass.

The Philadelphia City Hall.

WE are indebted to Mr. Jno. McArthur, Jr., for copies of the reports of numerous mechanical tests made by the United States Ordnance Department, at Watertown, Mass., of the strength of the various materials used in the construction of the new City Hall, of Philadelphia; also for reports of the Commissioners for the Erection of Public Buildings, to the Mayor relating to the progress and condition of this great work, and the expenditures therefor to the first day of this year. A few facts gleaned from these reports will doubtless be of interest to all architects and builders.

The Commissioners for the Erection of Public Buildings, to whom the erection of this City Hall was committed, were appointed in 1870. The first appropriation by the city government for the work was made April 6, 1872, to cover expenditures for 1870, 1871 and 1872, and amounted to $277,450. From the commencement of the work until the close of 1883, the appropriations for it aggregate $9,761,125.12. The amount of this money expended by the Commissioners to that date was $9,731,488.81.

The building is 470 feet by 486 feet 6 inches. The base of the main tower is 90 feet wide, and it will be 537 feet 4 inches high, or 27 feet 4 inches higher than St. Peter's, at Rome. The diameter of the clock face will be 20 feet, and the center of it will be 361 feet above the pavement. The whole number of rooms will be 520; total amount of floor-room, 14½ acres. The exterior of the entire structure above the basement, including its sculptural decorations, is of a durable dolomitic marble from the quarries of Lee, Mass. The iron framings of all the roofs, except those for the north center pavilions, were in place at the date of the report—March 8, 1884—and the whole of the roofs of the southern front, together with the south wings, wings and curtains of the east and west fronts, were covered with slate and Neuchatel mastic; the clock tower was then carried to a height of 118 feet above the street level; the principal staircase of the south center pavilion, 103 feet in height, was finished; the flying stair of polished granite and sandstone in the southeast corner pavilion had been set in place, 100 feet in height, ready to receive the cast iron dome and ceiling; this stairway will be 118 feet above the level of the first floor.

The principal work executed during this year will consist of the completion of the roofs of the north center pavilion and wings, which, with the exception of the dome of the clock tower, will complete the permanent covering of the building; to extend the marble and brickwork of the clock tower 80 feet higher; to construct boiler-house for use of electric light and elevator system, to set curbing and complete the sidewalks, etc. How much of the work laid out for the year 1884 will be accomplished can be reported with more certainty next January, but it is to be hoped that the finishing touches of the Philadelphia City Hall will not be so long delayed as the completion of that for similar purposes in Chicago. It is thought the Philadelphia building will be finished in about two years.

In view of the immense weight contemplated in this ambitious scheme of the Quaker City, it was important that the strength of the various materials used in the erection of the enormous walls should be thoroughly tested, in order to allay all fears and disquietude concerning the safety and stability of the building, and also that the contemplations and felicitations of the Commissioners and city officials (who were responsible for the erection of such a magnificent pile) over this work might not be overshadowed by any grim specter of calamitous possibility. It was well, too, that the excuse for such a lavish expenditure of the public funds should not be weakened by any doubts of the everlasting results obtained for the money, and the United States Ordnance Department was requested to test the strength of the various materials used in the massive walls, and the granites, marbles, limestones, sandstones, bricks and wrought and cast irons were accordingly tested by compression at Watertown, Mass., in August, 1882. The several tests were reported and published in detail, but occupy too much space to be reproduced in this journal; the following tabulated summary of them will probably be sufficient to give the reader an idea of the supporting strength of the several kinds of materials:

MARBLE.

Locality.	Color.	Direction of Pressure.	Total load applied.	Crushing force on a square inch, in lbs. avoirdupois.	Sectional area, in square inches.	Remarks.
Lee, Mass.....	Blue ...	End.....	715,000	20,504	34.87	Burst into fragments.
"	White..	Bed.....	800,000	22,370	35.16	Slight flaking on one face.
"	W. & B.	End.....	800,000	22,860	34.99	Without apparent injury.
"	White..	End.....	800,000	22,820	35.05	" " "
"	Blue ...	Bed.....	800,000	22,900	34.93	Flaked off along one edge.
"	W. & B	Bed.....	767,000	21,700	35.34	Crushed suddenly.
Montgomery Co. Pa.	Blue ...	Bed.....	466,300	11,470	40.64	Failed suddenly.
"	Blue ...	End.....	400,000	10,420	38.40	" "
"	Blue ...	Bed.....	543,000	13,700	39.63	Ultimate strength.
"	Blue ...	End.....	398,000	10,120	39.33	" "
"	Blue ...	End.....	347,500	9,590	36.24	" "
"	Blue ..	Bed.....	434,000	10,940	39.67	" "

LIMESTONE.

Conshohocken, Pa.	.....	End.....	494,000	14,090	35.05	Ultimate strength.
"	.....	Bed.....	566,000	16,340	34.63	" "
Indiana.....	.....	End.....	377,000	8,530	44.22	" "
"	.....	End.....	320,500	7,190	44.56	" "
"	.....	Bed.....	321,000	7,776	41.38	" "
"	.....	Bed.....	438,300	10,620	41.28	" "

DOVE-COLORED MARBLE.

Vermont.....	.....	Bed.....	531,200	13,400	39.65	Ultimate strength.
"	.....	End.....	379,800	9,870	38.48	" "

SANDSTONE.

Hummelstown, Pa.	.....	Bed.....	528,700	12,810	41.28	Ultimate strength.
"	.....	End.....	579,300	13,610	41.92	" "
Ohio.....	Buff ...	Bed.....	256,000	6,510	39.32	" "
"	Buff ...	End.....	199,500	4,863	41.02	" "
"	Buff ...	Bed.....	289,500	7,020	41.25	" "
"	Buff ...	End.....	160,000	3,940	40.06	Bearings imperfect.
"	Blue ...	End.....	305,000	7,680	39.69	Ultimate strength.
"	Blue ...	Bed.....	435,400	10,400	41.90	" "
"	Blue ...	End.....	391,800	9,795	40.00	" "
"	Blue ...	Bed.....	351,000	8,720	40.30	" "
"	Blue ...	End.....	672,100	16,280	41.28	Fractured suddenly with loud report.
"	Blue ...	Bed.....	493,500	12,420	39.74	Ultimate strength.

BRICK.

Manufacturer.	Quality.	Make.	Total load applied.	Crushing force, in pounds per square inch.	Area of sample in inches.	Remarks.
Dobbins.....	Hard ..	Machine .	288,500	8,610	33.50	Failure gradually took place.
"	"	"	411,000	11,720	35.07	Failed rapidly near close of test.
"	"	"	304,000	9,210	33.00	Ultimate strength.
Excelsior.....	"	"	261,000	8,310	31.39	Failed by breaking up.
"	"	"	180,200	5,540	32.53	Ultimate strength.
"	"	"	188,100	5,790	32.51	" "
J. R. Huhn.....	"	Hand... ..	591,000	18,690	31.63	Failed suddenly at very end of test.
"	"	"	346,400	10,970	31.57	Ultimate strength.
"	"	"	654,000	20,830	31.4	" "
"	"	..	364,000	11,150	32.64	" "
"	"	"	382,000	11,650	32.8	" "
Dotterer.....	Pressed	Machine .	256,500	7,770	33.03	" "
"	"	"	304,000	9,050	33.6	" "
"	"	"	243,000	7,210	33.70	" "

CAST IRON.

Form of specimen.	Diameter.	Length.	Total load applied.	Crushing force, in pounds per square inch.	Area of sample in inches.	Remarks.
Solid cylinder..	3"	5".998	501,000	60,360	8.3	Oblique fracture. Sides swelled.
Open cylinder..	4".41	6".001	566,000	68,190	8.3	Sides swelled.
" " ..	8".78	5".998	657,600	79,230	8.3	Fractured into twenty-five pieces.

WROUGHT IRON.

Form of specimen.	Height.	Length.	Total load applied.	Crushing force, in pounds per square inch.	Area of sample in inches.	Remarks.
Rolled I beam..	7".05	6".004	282,000	54,230	5.2	Flanges buckled outw'ds.
"	9".00	6".000	353,000	54,310	6.5	" " "
"	15".25	6".002	800,000	53,330	15.	Web and flanges buckled.

In November, 1883, tests were made which will serve to show the relative value of the different materials used in the construction of the piers. The following brief statement of the manner of proceeding precedes the report of these tests:

The piers were tested between flat compression platforms.

The covering plates of cast iron at the ends of the piers were allowed to remain in position, removing the tie-bolts during the tests.

The compression measurements and sets were determined by a micrometer, secured at either end to the compression platforms of the testing machine; thus indicating the total amount of compression which occurred as each increment of load was applied to the piers. Upon the removal of the loads to the initial 5000 lbs., the amount of permanent set was found.

The officer in charge of the tests adds to his report the following note and general abstract:

NOTE.

Upon examination, it was found that the mortar in most of the piers did not cover the ends completely, so that the covering plates only took bearing over part of the surface. In such cases, plaster of paris was used to fill the spaces and give even bearings; allowing the plaster to set at least twenty-four hours before testing.

Correct,

J. E. HOWARD.

F. H. PARKER,
Major of Ordnance Commanding.

GENERAL ABSTRACT.

Maker of Bricks.	Mortar.	Area in square inches.	Snapping sounds.	Per square inch.	Cracked.	Per square inch.	Ultimate strength.	Per square inch.
Dobbins.....	Lime.....	165.75	85,000	512	110,000	663	239,000	1442
"	"	162.56	150,000	922	150,000	922	259,100	1594
"	Cement	169.00	142,000	840	180,000	1065	356,900	2112
"	" ...	162.56	300,000	1845	300,000	1845	420,000	2584
Huhn,.....	Lime.....	156.25	78,000	499	160,000	1024	299,000	1914
"	Cement	159.38	320,000	2070	320,000	2070	428,000	2685
Dotterer,.....	Cement	156.25	.....	----	150,000	960	250,000	1600
"	Lime.....	156.25	.....	....	120,000	768	182,400	1167
Excelsior,.....	Cement	162.56	.....	...	240,000	1476	268,900	1654
"	"	159.38	100,000	627	220,000	1380	266,500	1672
"	Lime.....	158.76	.....	....	160,000	1070	178,800	1126
"	"	156.25	.....	....	100,000	640	124,900	799

ABSTRACT OF AVERAGE STRENGTHS.

In Lime mortar. *First crack*, 864.23 lbs. square inch, or 62.226 tons square foot.
" Cement " " " 1567.56 " " " " 112.864 " " "
In Lime mortar. *Ultimate strength*, 1375 lbs. square inch, or 99 tons square foot.
" Cement " " " 2141.4 " " " 154.18 " " "

The above mentioned reports were accompanied also by a printed description of the magnificent entrance on the north side, the principal one of the building. As a copy of it can be obtained, no doubt, upon application to the architect, John McArthur, Jr., Philadelphia, it is not necessary to republish it here. Architects who have not been supplied with a minute description of the work, and have not had the opportunity to study the novel and beautiful designs on the ground, would do well to send for it. The building, when completed will be one of the grandest monuments on American soil to the architectural genius of the nineteenth century.

Architects' Draughtsmen.

"BY T. SQUARE."

HARDLY any profession excites the imagination of young men with the state of feeling that the architectural does. The possibility of creating structures which shall be monuments of fame, lures each one to believe he may be the favored one, and if the candidate for the honor starts out to accomplish this purpose it is usually with the idea of reaching his ambition's desire with the least amount of trouble and by the shortest road possible — or rather a cut across the fields, even though it promise failure — haste seems the only rule; and it is singular how marked this desire is among students. The imagination constantly dwelling on the pictures of castles it would rear, too often believes it can do the work of an Angelo, long before the first rudiments are even mastered. This anxiety to hurry is singularly enough encouraged by the architects, who employ the students, and not without seeming good reason; first, to encourage the youth to earn something, which the boy likes, and for which he will work the harder; secondly, for a more selfish reason, that the youth may do work at cheaper rates than it could be obtained of experienced workmen. Of course, if the boy does as much as the man, and as well, at the manual work, he is entitled to pay accordingly; this we shall not dispute, but the results to the boy himself are so pernicious that they defeat the youth's ambition, and the high pay to him lures him to use his time to the labor until his increased expenses demand that he get still higher pay, and then he finds himself displaced in turn by the same kind of beginner that he was. He can not reach a higher place because he is unfitted, and too late he realizes that his golden harvest has deceived him; then he must either begin where he should have commenced at first or abandon the business, and try something else. His knowledge is also aggravated by the discovery that he is not alone; the numerous applications for work by others of the same standard of merit grows more numerous just at that time, showing him just where he is. Comparatively few ever rise above this standard, for realizing that the labor which should have been done is simply enormous, that the time already spent was even very limited, and seeing no way clear to meet expenses and devote time to study without sacrificing all pleasures, they usually become discouraged and abandon the business altogether; while the rest who remain commence their work at once, and after spending months in recovering, and years in toiling upward, reach a level above their fellows and reap their reward. This sketch of the beginning of draughtsmen and architects is not a rosy colored one, and though there are exceptions to this rule, yet in a measure there are parts of this description which fit in somewhere in every architect's life after he has begun office work. The early preparatory course of the college helps others so materially as to enable them to see a sure way of steady growth and promotion, they have been taught to realize the necessity of study from the first moments, and continue their studies through all the successive years of their business — for study does not end with the beginnings of a draughtsman; but he who would succeed must continue to

study, think and labor tirelessly, and if a successful business does not reward him, a leading position in a good office is always open to him. The purpose of this article is not only to show the position of the students, but besides this to awaken in them a realization that they owe a still more qualified and devoted attention to the business of their employer than they seem willing to accord, while the employer would further his true interests by devoting some attention to the encouragement of students to pursue a proper course of study, and also to devote all their energies to the attainment of a practical experience. Too well do we know the excuse of the architect that he does not, because after fitting them to render him proper service he loses them to those who are willing to pay them for their advanced attainments. This excuse does not hold, for the teacher receives better service while teaching, and if the student is worth more to another he is certainly worth quite as much where he is. Too much gratitude is expected in return for a meagre instruction, which of itself is more often less than the returns of gratitude given, and while ingratitude does occassionally occur, it is far more often the other way. Our plea is in the main for the architects advantage, and too well do architects know that if their juniors were better qualified by some earnest effort, they themselves would not be at the mercy of a senior who, often ruthlessly, treads over all rules of the office rough shod, because he is too valuable to be crossed. The fault therefore clearly shows itself to be on both sides, and our effort is not to hide the faults but rather to suggest, if possible, some method which will produce harmonious action, and raise the standard of the profession by one great effort to raise the qualifications of those who are at present subservient, because no opening seems to present itself for them to better themselves. This effort will be hard to make, for the number of those having offices is almost legion, not because the work to be done demands them, but because the ambition of the draughtsman is so great to be his own master, that he risks all to get his first fee, even at such reduced rates as to almost beggar him.

The picture so far is not a pleasant one — scratch or fall is the recourse left — and all interested know that in the main the results have not been to the honor of the profession or raised the standard one stone, and the high honor boasted of is too often the boast but not realized when competition offers a chance for some needy or less successful candidate to gain the work by some underhanded offer or method. With a profession composed of much of this element it will not be wondered at that jealousy does its work to keep the juniors down, that they in turn may not become competitors. And how can this state of things be altered is too deep a question to be answered at once, though we may, by looking abroad, see that England and France both encourage all students by offering free instruction, also by offering prizes for studies of merit, etc., while in this country nothing is done; any effort to unite draughtsmen for their improvement is looked upon with disfavor, because feared that in the union it might become a power, but this seems to be the only way left to follow. And though the union would become a power, its seems to us that its power might be for this general improvement, and also be a means of furnishing to architects the right kind of draughtsmen, and the holding of a membership be a credit to the member. The writer in his experience was well favored in regard to good masters, who kindly devoted some time to teaching office duties and rudimentary architecture, supplemented by good advice as to proper course of evening study; why there are not others as willing to do the same to beginners seems a mystery, though it may be a rule with some to do it — so much real ignorance exists in some offices. It is evident the assistants must help themselves to gain the requisite knowledge or go backward, for our profession does not lag by the way; new changes occur daily, and men long in the business know the need, too well, of fresh material up to the progress of the times in building matters.

We would suggest the forming of sketching clubs, such as now exist in some cities, and the work to be artistic as well as architectural. This union, by united effort, could first learn of each other and then seek information from various sources. But stay! right here some will say, I want to learn, but if I teach others then, oh then, where will I be? Alas! alas! for such selfishness, such a one is too blind to see his own ignorance, and if incentive, is needed for you to see your own good, you will find it in the approval of the architects generally, who will be sure to hear of your genius.

Discussion among us all of plans to prosper our cause should follow our thought on this subject, and no one will rejoice more than we at any step made toward improvement and progress in our profession — the grandest and noblest of all studies and practice.

The enormous iron contract upon the Chicago Opera House building is being placed by Clark, Raffen & Co., of Chicago. It includes some of the heaviest columns ever placed in Chicago, the corner column supporting the entire ten stories above.

Our Illustrations.

Residence for Potter Palmer, Esq., by Cobb & Frost, Architects, Chicago.

European sketches: Sketch from Nuremberg by Irving K. Pond. Sketches of foreign churches by W. A. Swasey.

Residence for A. L. Kane, Esq., at 324 Prospect avenue, Milwaukee, by Chas. F. Ringer, Architect. Residence for Geo. W. Spofford on Washington Boulevard, near entrance to Garfield Park, Chicago, by Burnham & Root, Architects. (These photographic reproductions are from J. W. Taylor's sets of photographs of Chicago and Milwaukee residences.

West Hotel, Minneapolis, by L. S. Buffington, Architect. This hotel, which is approaching completion, has been largely built with Chicago material. It is one of the best fireproofed buildings in the country, and in decoration the aim has been to place it first among the many beautiful hotels in the west. The cost of the building when completed, it is said, will exceed that of any hotel yet erected in the United States.

Office building for L. P. Hansen, by John Addison, Architect, Chicago. This building, which is being erected upon the site occupied by the old "Times" building before the fire, is to be five stories in height. The first and second stories are formed of piers of rock faced buff Bedford stone. This is surmounted by a belt course of terra-cotta, above which the walls are of Chicago pressed brick. The cornice and panel ornamentation of terra-cotta, which is exceptionally fine both in its adaptation to the general design of the building, and as a sample of their material was produced by the Northwestern Terra-Cotta Works. The design of the building is for stores on the first floor and offices above, provision being made for fire-proof vaults, etc., and the building will be heated and ventilated by one of the best of systems. In the construction it was not thought necessary to fire-proof the structure, though iron beams, girders, joists, and other methods of rendering a building fireproof are thoroughly carried out in this structure, while the arrangement of the offices is exceptionally creditable and convenient. It will be finished about Jan. 1st, and will cost about $60,000.

New Publications.

ARCHITECTURAL SHEET METAL ORNAMENTS AND STATUARY, manufactured by Bakewell & Mullins, Salem, Columbiana county, Ohio,—Fourth edition, No. 4, "C," 1884.

This is the inscription of an ornate plate used for the first cover page of a nicely printed illustrated catalogue and price list of 148 pages. The volume is one that will be regarded with interest by other persons than those for whose information it was especially designed, in that it exhibits the infinite variety of architectural designs wrought of sheet metals, and in suggesting the great importance such materials have attained latterly in structural decoration. As stated in one of the introductory pages "the use of stamped metal ornaments as a means of ornamenting architectural sheet metal work has, within a comparatively few years, increased to such an extent as to have added an almost entirely new branch to the industries of the country," and that owing to the increasing demand for this class of work, the publishers of this catalogue have found it necessary to add a great many new designs to their already large assortment. The illustrations number many hundreds, and range from small rosettes two inches in diameter to the heaviest and most elaborate cornices. The rosettes shown range from two inches to fifty-five inches in diameter, and many of them are exceedingly attractive. Leaves for brackets, mansard leaves and ornaments, volutes, feathers, heads and faces, medallions, drops, panel ornaments, scrolls, ribbons, drapery, stems, branches, buds, fruits, flowers, stamped lentils, modillion faces, enrichments for mouldings, etc., etc., are very numerous, beautiful and suggestive of the great adaptability of sheet zinc for the most elaborate scheme of architectural embellishment. Then comes pressed zinc crestings for the tops of houses, porches, etc., enrichments for mouldings in great variety, consoles, bay brackets, and a cut of one griffin, which is as absurd in conception and as harmonious in combination as any myth that ancient Greek ever imagined or other heathen would delight in. There are blocks and quoin pieces, mortars, horses, bovines, and other figures for business signs; stamped busts and garlands; spandrel and frieze pieces, crestings and draperies, rich and artistic; balustrade courses and inside cornices of great beauty; stamped and hammered statuary; a profusion of capitals, representing the classic orders, some of which are of recent production; many new designs in finials; urns, balls, balusters, etc., in *spun* sheet metal work; and a variety of articles which cannot be enumerated here. The catalogue is one that architects, builders and contractors will find very convenient to have around as well for their own use as for the information of their customers. The cuts are, for the smaller articles, made upon the uniform scale of one inch and the larger of one-half inch to the foot, in some cases giving both front and latteral views, and as both engraver and printer have done their work in a very skillful manner, a very correct idea may be obtained from the illustrations of the appearance of the articles they represent. This edition supersedes all previous catalogues and price lists issued by Messrs. Bakewell & Mullins, and their customers should not fail to make a note of this fact, and if any fail to find among the illustrations such articles as they want, they have only to send a sketch of the article desired, and if Messrs. Bakewell & Mullins are not able, from a great variety of designs in stock which are not illustrated in this catalogue, to compose the design wanted, they will be able to make it to order, but will add the cost of the dies to the price of the article.

The reception committee appointed to provide for the care and entertainment of visiting architects during the convention, consists of architects D. H. Burnham, W. L. B. Jenney, John W. Root, W. W. Boyington, Sam'l A. Treat, Henry Ives Cobb, John Addison, Louis Sullivan, Francis Whitehouse, W. W. Clay, Normand S. Patton, S. S. Beman, O. A. Wheelock, John M. Van Osdel, A. Bauer, Maj. James R. Willett, and Henry Lord Gay.

Synopsis of Building News.

Anoka, Minn.—Architect W. J. Miller reports the following: Since the heavy fire, which occurred on the 16th of August, rebuilding has proceeded with much vigor. There are in process of erection in the burnt district the following buildings: For R. M. Taylor, two-story, 25 by 80 feet, two store fronts. For J. A. Foote, block, one store and postoffice, one story, 41 by 60 feet, pressed brick front. For C. N. Campbell, one story, one store front, 25 by 60 feet, pressed brick. Cundy Block, on Second avenue, two stories, two store fronts, 50 feet front. Curial Block, two story three story fronts, 50 by 70 feet, pressed brick. First National Bank, banking room, two stories, 22 by 42 feet, pressed brick. For Chesley & Lindsey, L-shaped, two store buildings, two store fronts, main store 28 feet front, front on Public Square, 19 feet wide, pressed brick. Architects Dunnell & Elliott: Syndicate Block, two stores, two-story, pressed brick. For Olof Norell, block of three stores, five fronts, two stories. Architect Brownell: For L. H. Bruns, one store, two-story, pressed brick. For J. M. Woods, one store, two stories, pressed brick. For Wm. Cunny, one store, two stories, pressed brick, 33½ feet front. Architect Geisemann: For A. C. Frauman, one store, two stories, pressed brick. For Jno. Mayall, one store, two stories, pressed brick; also the Washburn Block, 50 by 100 feet, bank and store fronts, two stories, pressed brick. For H. L. Tichnor, one store, two stories, pressed brick. For Bran & Guderian, one store, one story. For C. G. Jackson, one store, two stories, pressed brick. For G. I. Pease, two stores, two stories. For E. A. Novell, one store, two stories. For C. G. Jackson, two-story brick livery stable, 30 by 82 feet. Other buildings will be started soon, among them an Opera House, about 47 by 130 feet, on ground for which plans are now being made. A large number of frame buildings are being erected, among them two livery stables, one large carriage factory, shops, etc., and a skating rink, 50 by 150 feet, built by M. H. Kinne.

Ashland, Minn.—The plans for the water works here include a fine brick building for the pumps, with a chimney 100 feet high.

Aurora, Ill.—Building business is practically closed up for the season, no new buildings being started. The general impression is, that the coming winter will be very dull.

Architect J. Mulvey reports: For German Lutheran Society, brick and stone church building, 44 by 76 feet, cost $10,000, under way. For Lutheran Society, at Sandwich, Ill., stone and wood church building, 28 by 46 feet, cost $2,300, under way. Repairs on Congregational Church at Aurora, cost $8,000, under way. For John Plain, two-story and basement, stone and brick grist mill, 28 by 44 feet, cost $2,300, under way. For Mr. C. Abel, two-story frame residence, 28 by 50 feet, cost $3,000, under way. For O. M. Shedd, three-story and basement frame dwelling, 40 by 68 feet, cost $4,900. For C. Wemang, two-story and basement brick and stone store building, 26 by 80 feet, cost $5,800, under way. For Mrs. Collins, two-story and basement brick and stone store building, 24 by 60 feet, cost $4,900, under way.

Atlanta, Ga.—Architects Fay & Eichberg report: For J. J. Griffin, two-story and basement brick and frame dwelling, 38 by 65 feet, cost about $3,500, under way; J. G. Clark & Son, builders. For Capital City Land and Improvement Co., three-story brick and stone building, 45 by 160 feet, cost about $11,000; projected. For Anderson Logan, two-story frame dwelling, 20 by 61 feet, cost $2,500. For W. A. Moore, two-story brick block, 50 by 86 feet, cost about $7,000; projected. For D. Mayer, two-story brick block, 25 by 70 feet, cost $4,500; projected.

Boston, Ind.—Business has been very good throughout the season, and considerable has been done in the building line, and wages have been fair. It is not likely that much more will be done before spring.

Architect John F. Henry reports: Finishing for John Miller, two-story frame dwelling, covering 16 by 16, 16 by 32 and 18 by 24 feet, cost $2,000. For Ira Starr, two-story frame dwelling, covering 16 by 16, 16 by 32 and 16 by 18 feet, cost $2,200. Also six two-story frame dwellings, ranging from $900 to $1,500, and aggregating $8,300. Two one-and-a-half-story frame dwellings cost $1,200 each, and one to cost $1,800, and one one-story, $800. Also five one-story and two two-story barns, aggregating $6,200. All the above work under way or just finished.

Cedar Rapids, Ia.—Though late in the season, weather is favorable and new buildings are being started.

Architects Josselyn and Taylor report: For Mr. S. C. Bever, two-story pressed brick building, 54 by 66 feet; all modern improvements; cost, $15,000; being plastered; A. H. Connor, builder. For Mr. C. H. Clark, two-story frame residence, 42 by 66 feet, steam-heating, etc.; cost $8,000; just finished; L. Wallace, builder. For Mr. D. W. Jones, two-story frame residence, 36 by 50 feet, cost $4,000; under roof; W. Scharfenberg, builder. Congregational Church building, frame, three stories high, 21 by 50 feet; cost $3,200; frame up: L. Cooper, builder. Industrial School building, two-stories high, 32 by 46 feet, cost $2,500; finished; L. Cooper, builder. For Mr. Wolf, two-story brick building, 36 by 52 feet, cost $3,500; foundation in; the owner is the builder. For Independent School District of Waverly, Ia., two-story brick building, 26 by 32 feet, cost $3,500; completed. For Williamsburg (Ia.) Savings Bank, two-story brick bank and office building, 20 by 50 feet, cost $3,000; foundation in.

Cheyenne, Wy. Ter.—Architect Jas. Anderson reports a three-story brick building, 40 by 130 feet, cost about $42,000; for Idelman Bros.; E. R. Hurd, builder. At Fremont, Neb., a two-story brick residence, 52 by 64 feet, for Mr. Edward Blewett; cost $19,000. At Green River, Neb., for W. A. Johnson, a two-story brick and stone building, 30 by 100 feet, cost $11,000.

Chicago, Ill.—The building season is about closed, as far as projected work is concerned, though the exceptionally fine weather is allowing the work under way to be pushed toward completion.

Architect P. W. Ruehl reports under way: For Aug. Thiele, residence, 25 by 60 feet, cost $6,000; F. Sloppe, contractor. C. Schlecht, residence, 22 by 60 feet, cost $5,000. A. Dilha, four-story stores on Blue Island avenue, 52 by 120 feet, cost $25,000; Benes & Sayer, contractors. M. Oesterreicher, three-story stores and flats, 48 by 100 feet, cost $15,000; F. Koeppe, contractor. T. Purcell, four-story stores and flats, 25 by 75 feet, cost $12,000. S. L. and A. J. Wood, residences, 48 by 45 feet, cost $14,000. F. Malkow, stores in Englewood, 48 by 75 feet, cost $8,000; Lucht & Madden, contractors. Peter Delp, residence, 22 by 65 feet, cost $5,000. J. Rehwinkel, flats, 21 by 60 feet, cost $4,000; P. Reuter contractor. J. Wilsmoosky, stores and flats, 24 by 75 feet and 24 20 feet, cost $9,000; A. Loula, contractor. N. Fegen, stores, 23 by 84 feet, cost $9,000; C. Geyer, contractor. J. Stephan, stores, 24 by 70 feet, cost $6,000; J. Wartman, contractor. Hy. Perges, stores and flats, 24 by 80 feet, cost $11,000; A. Loula, contractor. Mrs. Haberborsch, stores and flats, 30 by 60 feet, cost $10,000; C. Kies & Son, contractors. F. Homan, stores and flats, 48 by 135 feet, cost $25,000; projected.

Architect John Clifford reports: For Geo. A. Bender, three stories and attic, 25 by 50 feet, cost $4,960; Mowat & Crawford, contractors. Richard Waterman, three stories and basement, 43 by 56 feet, cost $5,000; projected. Also depot and two stores, aggregating $8,755. He planned, also, for John Walpole, residence, pressed brick, cost $5,300.

Architect Fred Alschlager reports for H. D. Dornedden, of South Chicago, a brick block, 75 by 75 feet, three stories and basement, pressed brick front and stone trimmings, cost $16,000; contract not let. Also a frame cottage and frame store building at South Chicago, aggregate cost $4,500.

An architect who neglected to give his name, reports: For F. Kamin, two-story store and flat building, corner North avenue and Davis street, 46 by 70 feet, Indiana pressed brick front with stone trimmings, cost $9,000; Chas. Krueger, mason; Seemann & Co., carpenters. E. A. Grimm, at 257 Bissell street, a two-story and basement residence, 22 by 54 feet, Anderson pressed brick, with molded brick and stone trimmings, cost $4,500; contracts not let. Other buildings under way.

Architect W. L. B. Jenney has charge of residence for G. W. Sheldon, on Astor street, north of Banks, two stories, basement and attic, fronts of plain and ornamental pressed brick. Also a handsome house for Mr. Morose, on Grand Boulevard, near Fortieth street; first and second stories rough stone, and upper stories pressed brick and stone.

Architects Bauer & Hill designed block of stores and flats for A. T. Stephenson, 90 by 65 feet, corner of LaSalle and Division streets, three stories, fronts of iron and brick, with stone and terra cotta trimmings.

Architect O. Matz has charge of twelve four room flats for N. Busch, on Orchard street, near Willow, 45 by 80 feet, three stories, pressed brick and stone, cost $12,000. A vaulted drive through center leads to a spacious court.

Architects Trent & Foltz have prepared plans for fifteen houses to be built on Prairie avenue, between Forty-first and Forty-second streets, for a New Orleans capitalist. They will be two-story frames, one to every forty feet for a block, modern and stylish, at cost of $2,500 each.

Architect Wm. Drake is building for himself a residence at 4822 Lake avenue, front of Trenton pressed brick and stone trimmings, one side Indiana pressed brick, the other side of Pullman pressed brick, 30 by 60 feet, slate roof

After plans by Architect W. Henri Adams, a tasteful residence has been completed for F. A. Bowles, on Fifty-third street, Hyde Park, material, frame and slate, in a grouping of bow windows, domes and pleasing angles; cost $8,000.

Architect N. S. Patton planned Library building for Scoville Institute, at Oak Park, to be of Lyons limestone, with trimmings of Bedford stone; cost $60,000.

Architect A. Boessler, plans for two dwellings for W. Brushaber, 132 Coulter street two stories, 42 by 50 feet, pressed brick and stone fronts.

Architect J. Zittell, plan for John Wheeler, 164 LaSalle street, dwelling 24 by 65 feet, three stories, front of pressed brick and stone.

Architect L. B. Dixon has charge of six two-story dwellings for A. M. Gentry at 3552 to 3562 Prairie avenue, 113 feet front, by 64 feet deep, Anderson pressed brick, cost $20,000.

Architect L. Frey planned for W. Carberry, at 2727 Archer avenue, store and dwelling, 23 by 60 feet, cost $10,000; under way.

Architect Kley, plans for store and residence, corner North and Washtenaw avenues, 25 by 50 feet, cost $10,000.

Architect S. M. Randolph, plans for J. H. Buffum, three-story residence, pressed brick, brown stone and terra-cotta, cost $10,000.

Architect J. C. Cochrane reports: A Female Seminary, addition to Knox College, at Galesburg, Ill., three-story and high basement, brick, with cut stone trimmings, cost $10,000; contract not let. Furniture plans for the Valparaiso Court House, all of hardwood, cost $10,000; this with the frescoing contract ($5,000) not let. Plans of furniture for Cook County Hospital Drug Store, to be of cherry, cost $1,500. Also plans for brick chapel for the Central Baptist Church, cost $7,000.

Architects Edbrooke & Burnham report the following under way: For A. W. Merrill, on Rhodes avenue, near Thirty-fourth street, a two-story dwelling, brick and stone, 25 by 60 feet, cost $6,000, James Rutherford, mason; F. Blair, carpenter. For E. B. Clark, adjoining above, three two-story dwellings, each 18 by 60 feet, cost $10,000; same builders. For Campbell Bros., on Flournoy street, between Western and Campbell avenues, a block of four dwellings, each 20 by 54 feet, cost $16,000. For J. O. Smith, at Winnetka, Ill., six frame cottages, each 20 by 34 feet, cost $15,000. For J. L. Campbell, five dwellings, two-story and cellar, each 20 by 45 feet, cost $20,000. For C. W. Woodman, one dwelling, three stories, 20 by 65 feet, cost $7,000; Wilkie & Holman, masons; Wintermier & Dempsey, carpenters. For J. A. Kirk, at Pine Lake, Wis., 450 feet of greenhouse and grapery, cost $15,000. For Freeman Campbell, five brick dwellings, 40 by 40 feet each, cost $15,000. Also plans for Hevly Debris, one two-story flat building, on Sherman street, 22 by 65 feet, to cost $7,000; to start next spring.

Architect Oscar Cobb reports erecting for Geo. E. Cave, South State street, a three-story store and residence building, with pressed brick front, terra-cotta and galvanized iron trimmings, 25 by 86 feet. For Lazarus Silverman, on Cottage Grove avenue, between Thirty-fifth and Thirty-sixth streets, a block of eight buildings, three stories, 154 by 70 feet, limestone front, cost $50,000. For Geo. D. Holton, on Cottage Grove avenue, between Thirty-fifth and Thirty-sixth streets, two three-story buildings, pressed brick and terra-cotta finish, 44 feet front at north end of Thomas Row, cost $10,000; under contract. Also in preparation, plans for an apartment house on North side, to cost $60,000.

Architect L. G. Halberg reports for L. H. Eames, store and warehouse, six stories, 40 by 165 feet, faced with Anderson pressed brick, brown stone and terra-cotta trimmings, cost $50,000; John Griffith, mason. For John A. Cole at Hyde Park, residence on Fifty-third street, frame, with brick basement, cost $5,000. For Otto Peitch, Ravenswood, two-story frame with basement, cost $3,000. For H. W. Lewan, on Elm street, east of State, five three-story brick dwellings, cost $25,000; A. Carlson, builder.

Architect Jas. H. Moore has planned a two-story dwelling to be erected at 1401 Wabash avenue, for Mr. N. F. Merrill, cost $12,000.

Architect Theodore Karls has in course of construction for Mrs. C. Deeden, three-story and basement, flats, 27 by 70 feet, cost $14,000.

Architects Schaub & Berlin have planned for F. Kamise, two two-story dwellings to be erected at 664 and 666 North avenue, cost $10,000.

Architects Furst & Rudolph have prepared plans for a handsome residence to be erected for Mr. P. Rattey, at 2962 Bonfield avenue, cost $10,000.

Architects Wm. Strippleman & Co. are to erect a three-story store building, 20 by 75 feet, for H. Goldsmith, cost $10,000.

Architect E. Baumann has prepared plans for a three-story and basement dwelling, for J. Theurer; it will be 28 by 82 feet, pressed-brick front with stone trimmings, cost $16,000.

Architect W. L. B Jenney has prepared plans for a handsome twelve-room cottage, to be erected at Hyde Park, for Mr Charles Brewster.

Architect W. H. Drake: For W. H. Launder, at 3630 and 3632 Stanton avenue, residence, 40 by 50 feet, cost $10,000.

Architects Thomas & Rodgers: Two two-story dwellings, at 474 and 476 West Congress street, cost $10,000; John Gillespie, builder.

Architects Furst & Rudolph: For E. S. Blake and J. W. Crawford, a $10,000 brick dwelling at Nos. 143 to 145 Dearborn avenue; Robinson & Miner, builders.

Architect W. F. Furber: For George M. Hull, a $5,000 brick dwelling, at 1168 to 1170 West Harrison street.

Architects Edbrooke & Burnham: For Freeman Campbell, five $10,000 brick dwellings, at 381 to 389 Irving avenue; T. Campbell, builder.

Architect F. L. Charnley: For J. J. Gore, a $12,000 block of dwellings at 2617 to 2621 Wabash avenue; Barney & Rodotz, builders.

A double residence for A. Schmitt is going up on the corner of Drexel boulevard and Forty-sixth street. It is of pressed brick and brown stone, and will cost $30,000.

Mr. Seeberger, of Seeberger & Breakey, will build a two-story brick block of stores, with dwellings above, sixty feet north front, on Thirty-ninth street, near Michigan avenue.

Plans for a $10,000 two-story residence for J. H. McEvoy are in readiness, and work will begin at once, at 489 Hermitage avenue.

A handsome brick and stone residence for A. Montgomery is going up at the corner of Forty-seventh street and Kimbark avenue.

Work has been begun on a row of six three-story brick and stone dwellings on Oakland boulevard and Langley avenue, for W. H. Burnett.

Two handsome double houses of brick and stone are being erected on Jefferson avenue, between Fifty-first and Fifty-second streets, at a cost of $17,000.

Lots have been purchased for the purpose of erecting suitable school buildings at Hegewisch.

J. W. Stewart is building a three-story store and dwelling, 21 by 63 feet in size, at 3610 Cottage Grove avenue.

Two three-story brick and stone residences are being built on Fifty-third street, near Park avenue, by C. S. Baker.

C. W. Coolidge is building a large residence of brick and stone at the corner of Forty-eight street and Kimbark avenue.

For Scott & Gage, a $9,000 store building has been planned, to be erected at Nos. 158 to 164 Kinzie street.

Cincinnati, O.—Architect Emil G. Rucckert has drawn plans for the following new buildings: Two-and-a-half-story brick for Wm. Magley, cost $7,000. Frame dwelling for Judge M. B. Hagans, at Ivanhoe, cost $3,000. Double two-and-a-half-story brick dwelling for Shaeffer estate, cost $5,000 each. Two-and-a-half-story frame residence for Peter Reuble, cost $3,500. Addition to brick dwelling, cost $3,000. Also, under way, four-story pressed brick stores and flats, for C. A. Gobrecht; Shimp & Kolbe, builders.

Cleveland, O.—The work on the alterations of the old Court House is progressing rapidly. The walls are finished and the cornice has been placed in position. The roof, which is to be entirely of iron and slate, will be without trusses, and will be supported by the partition walls, which are to extend through to the rafters. The roof will have a low pitch, and will have a simple Greek cornice. In the center of the roof above the stairways will be a sky-light 26 by 36 feet, which will afford light and ventilation to the hallways, which have formerly been very poorly lighted. The front of the building is a vast improvement on the old structure. The windows of the upper floor are especially noteworthy, being in the form of Roman arches springing from Corinthian columns. On the keystone of each arch is a face carved in bold relief, so as to be seen to advantage from the sidewalk. The Commissioners have under consideration the plans for a portico two stories high with twelve feet projection, each story consisting of a series of Corinthian columns and Roman arches. The whole to be surmounted by a highly ornamental balustrade.

Architect C. O. Arey reports: For Miss O. A. Meech, double two-story frame dwelling, 56 by 64 feet, cost $7,000 completed. For J. C. Shields, two-story frame dwelling, 35 by

70 feet, cost $5,000, H. C. Culver, builder. For E. J. Cutler, two-story frame dwelling, 47 by 35 feet, cost $4,000; under way. For Henry Wick, three-story brick and stone building, 58 by 75 feet, cost $16,000: taking bids. Also three frame dwellings aggregating $8,600.

Davenport, Ia.—Very little new work projected.

Architect E. S. Hammatt reports: For D. S. Sheldon, two-story brick and terra-cotta building, cost $7,000; drawings just completed. For P. J. Kenney, at Rock Island, Ill., two-story frame residence, cost $1,200; under way. For Wm. L. Crowder, M. D., at Oskaloosa, Ia., two-story frame residence, cost $2,000; under way. For J. M. Wells, at Moline, Ill., two-story frame residence, cost $2,000; under way. For G. H. French, at Davenport, alterations, cost $2,000; under way. Luther Hall: for Augustana College, four-story building, 165 by 70 feet, first story of stone, above that brick with stone and terra-cotta trimmings, cost $70,000; under way; J. A. P. Berg, contractor. Kemper Hall for Griswold College, three-story, 81 by 50 feet, first story of stone, second and third of pressed brick with Sioux Falls granite trimmings and black slate roof, cost $20,000; ready for bids. Remodeling "St. Katherine's Seminary." Just completed sketches for small brick church building at Des Moines: also, just completed, club house for Irrawadi Canoe Club, frame building, cast $600; completed.

Des Moines, Ia.—Not much new work projected.

Architects Josselyn & Taylor report: For C. H. Getchell, additions, two-story frame, 40 by 18 feet, cost $1,800; under way. For H. S. New, two-story nine-room frame dwelling, 24 by 46 feet, cost $3,000; under way; F. S. Whiting, builder.

Detroit, Mich.—Architects Carl Schmidt & Bridges report outlook favorable and work of office: For J. R. McBrearty, two-story brick store building, cost $4,300. For Gottleib Kengott, two-story brick for store and two residences, cost $7,000. For John Engels, block of two-story brick stores, cost $5,000. For Joseph Buehler, a brick residence for summer resort at Gross' Point, cost $3,500; and other smaller buildings, aggregating$ 5,900.

Oct. 20 the scow Louise, loaded with 150,000 brick, sailing up Lake Michigan, ran into a pier, broke in two and sank. Vessel and brick were a total loss. The boat, owned by Chas. Chamberlain, of Detroit, was valued at $3,500, and was insured for $2,000 in Boston Marine.

John Japis is covering a triangular lot, corner of Gratiot avenue and Brewster street, with a two-story brick store, cost $4,000. The American News Company's block will be 53 by 114 feet, three stories, cost about $25,000; Donaldson and Meier, architects; A. M. Gray, contractor.

John Edwards took out permit for a two-story brick house on Elliot street, to cost $7,000.

Architect A. C. Varney is engaged on plans for the St. Clair Hunting and Fishing Club House, 175 by 36 feet, with wing at each end running back 39 feet, two stories, to be finished in unique manner. It will contain a reception room 21 by 44 feet, parlor, dining hall, smoking rooms and offices. The stairs will wind around a large open fireplace, in front of main entrance to another reception room. There will be sixty sleeping rooms.

Detroit, Minn.—A. A. Whittemore has arrived with a large force of carpenters and bricklayers, and work is now actively going on at the Court House. The walls are already beginning to loom up, and fifty men are at work. It is the intention to have the building up and enclosed before the snow flies.

Duluth, Minn.—A syndicate has been formed in this city to build a large four-story hotel at South Duluth, size 150 by 150, with all modern improvements. Work will not probably be commenced before next spring. About two hundred men are now at work at South Duluth, cutting out underbrush and grading streets. A large number of buildings have been erected during the summer and more are under way. About twenty-five streets have been partially graded.

Emporia, Kan.—Outlook fair.

Architect C W. Squires reports: For Baird Bros., two-story brick, stone and iron business block, 50 by 100 feet, cost $10,000; under way; C. L. Jillson, builder. For H. G. Wiser, stone and iron barn, 167 by 67 feet, cost $10,000; under way; Protherve, Swain and Johnson, contractors. For Pettengill & Norton, two-story brick, stone and iron business block, 50 by 80 feet, cost $7,000; under way; L. W. Lewis, builder. For I. Jones, two-story brick and stone business block, 50 by 100 feet, cost $8,000; under way; E. F. Sprague, builder. For R. D. Thomas, two-story, basement and attic frame residence, 54 by 76 feet, cost $9,000; under way; D. L. Thomas, builder. For C. L. Severy, two-story basement and attic frame residence, 40 by 62 feet, cost $4,000; under way; John H. Peck, builder. Eureka, Kan., City Hall, two-story stone and iron building, 25 by 70 feet, cost $3,000; contract not let. For Geo. A. Hall at Eureka, two-story brick and stone business block and hall building, 50 by 100 feet, cost $9,500; C. W. Rich, builder. For First National Bank at Eureka, two-story brick and stone building, 25 by 75 feet, cost $8,000; under way; Boile & McKenzie, contractors. For G. C. Millar, at Hutchinson, Kan., two-story residence, 45 by 70 feet, cost $5,700; under way; Johnson & Co., builders.

Fergus Falls, Minn.—The third ward of this city has voted $10,000 for a new school house, which will be put under way at once.

Frankfort, Ind.—Architect J. W. Hammond reports: For Mr. Eissman, two-story frame dwelling, 38 by 44 feet, cost $2,500; under way; J. F. Evans, builder. For Mr. J. E. Hilliss, two-story brick residence, 38 by 57 feet, cost $8,000; under way; U. M. Palmer, builder. For Mr. P. Given, two-story frame dwelling, 53 by 53 feet, cost $3,000; under way; J. F. Evans, builder. For Mr. A. R. Shefler, at Gettingsville, Ind., brick store-room, 22 by 115 feet, cost $3,000; under way; D. Anderson, builder. For Mr. Kramer, at Columbus, Tenn., two-story frame dwelling, 32 by 46 feet, cost $2,500; under way; U. M. Palmer, builder.

Fredericktown, Mo.—Present condition, dull; outlook, fair.

Architect R. Albert reports: For Mr. J. Schilton, one-story frame dwelling, 28 by 16, and 14 by 20 feet, cost $1,500; under way. For Mr. J. P. Johnson, two-story frame dwelling, 32 by 18 feet, cost $1,600; projected. For himself, Mr. Albert is to build a one-and-a-half-story frame cottage, 32 by 16 feet, cost $900.

Glencoe, Minn.—A. M. Knight is erecting a brick veneered residence, 40 by 68 feet, to cost $5,000. F.G Corser, Minneapolis, architect.

Hannibal, Mo.—Architect J. Oliver Hogg reports: For Jas. R. Hinlin, one-story frame dwelling 40 by 40 feet, cost $2,000; contract let; J. W. Key, builder. For M. F. Brant, two-story brick store and dwelling, 40 by 36 feet, cost $3,000; under way. For Mrs. Rendlem, two-story brick store and dwelling, 20 by 40 feet, cost $2,500; under way. For Shedd & Patten, two-story factory building, 65 by 65 feet, cost $2,000; excavating. For Hutchinson Bros., two-story brick factory building, 30 by 50 feet, cost $1,000; under way. For Mr. C. Hostmeir, two-story frame dwelling, cost $1,800.

Hatton, Dak.—Several large, fine buildings are in course of erection in this place, and everything is bright and prosperous. The town is rapidly developing.

Kansas City, Mo.—Architect F. B. Hamilton reports: For J. F. Richards, adding fourth story to brick building, 48 by 106 feet, cost $3,000; just completed. For J. F. Richards, four-story brick and stone warehouse, 48 by 106 feet, cost $18,000; foundations in. For A. F. Lewis, Carthage, Mo., frame residence, cost $3,000; foundation in.

Lincoln, Ill.—Present condition and outlook fair. Wages good.

Architect W. A. Corwine reports: For Wm. M. Dustin, two-story frame residence, 30 by 52 feet, cost $4,500; completed; M. B. Pettus, builder. For F. Frorer, two-story brick residence, 51 by 77 feet, slate roof, stone and galvanized iron trimmings, cost $18,000; projected. At New Holland, Ill., public school building, two-story frame, 38 by 40 feet, cost $2,500; projected.

Mankato, Minn.—Work here in building operations is very dull. The brick work on the West Mankato school house is nearly completed. The mammoth warehouses of the Mankato Cement Works, built entirely of stone, will be finished this month. Bids are asked for laying 300,000 brick in the new Catholic church, of which Mr. Geo. Pass is the architect. Messrs. Norman & McCall are contractors for the foundation. The Misses Drullard are erecting a pleasant dwelling on Fourth street. The main part is 24 by 24 feet, with an addition 16 by 18 feet.

Marseilles, Ill.—The outlook for next year is good.

Architect A. W. Allen reports: For Amzi F. Jackson, store building, 20 by 70 feet, cost $1,600; projected. For Dr. C. A. Werick, at Des Moines, a dwelling, 26 by 40 feet, cost $2,500; projected.

Milwaukee, Wis.—A conflagration on the night of October 23d ult. destroyed, among other buildings, the large dry goods house of T. A. Chapman & Co., erected in 1872, at a cost of $200,000. Mr. Chapman has decided to commence rebuilding at once, and the plans and work for the new structure have been committed to Architects E. T. Mix & Co., who say the building will be completed and ready for business within 100 days from November 1. It will be one story higher than the old one, which it will resemble externally. It is to be plain, but as solid and substantial as iron and masonry can make it. The trimmings will be entirely of brick and cut stone. A marked improvement will be made on the Milwaukee street side by a large plate-glass show window at the north end, and a better arrangement of the windows for a west light. The Milwaukee street entrance, a miniature Grecian Temple, which passed through the fire with comparatively no injury, is to be retained in the new structure. The interior arrangement will be in many respects similar to that of the burned establishment, with such improvements as may prove advisable. The matter of good light will be particularly looked to, as will the general arrangement for convenience, room and comfort to customers and employés. Contract let for $200,000. A building permit has been issued to R. J. Johnson, for a brick structure, on Knapp street, to cost $6,000.

Minneapolis, Minn.—Architects Dunnell & Elliot report a Catholic school-house of stone, brick trimmings, on the East side, 24 by 36 feet, four rooms, cost $12,000.

Architect C. S. Sedgwick reports a residence for J. E. Bell, on Twenty-fourth street south and Park avenue, 60 by 72 feet, cost $20,000. Residence for Donnell Kennedy, 52 by 69 feet, cost $20,000. Second Congregational church and chapel on Twenty-second street south and Park avenue, size 47 by 64 feet.

Architect I. W. Kelly reports a residence for J. A. Moynihan on Ninth avenue south, 30 by 45 feet, cost $3,000. Residence for J. M. Patterson, 8 rooms, on Bloomington avenue, between Twenty-sixth and Twenty-seventh streets, 30 by 45 feet, cost $2,500. Four tenements on Eleventh street, between Hennepin avenue and Harmon place, for R. H. Abraham, 80 by 64 feet, cost $10,000, with all modern improvements. Two frame houses for T. Zesbaugh, on Shade street, in Ridgewood addition, each 28 by 45 feet, cost $2,000 and $2,500.

Architects F. B. Long & Co. report a two-story frame dwelling on Hawthorne avenue, 26 by 50 feet, cost $4,000. A two-story frame house for D. Morland, on Stevens avenue and Thirty-third street, 27½ by 40 feet, cost $3,000. House for R. E. Trafton, in Highland Park, cost $3,500. A stable for W. W. McNair, on Thirteenth street and Lyndale avenue, cost $10,000. Residence for Mr. Finch, on Lincoln avenue and Twenty-sixth street, cost $3,000. A three-story flat building for L. F. Menage, on Sixth avenue north and Ninth street, cost $10,000. Twenty-five houses for L. F. Menage, on Sixth avenue north between Lyndale avenue and Eleventh street, cost $1,000 each. A house for Geo. Salmon, on Highland avenue, cost $5,000. At Waupeton, Dak., for W. P. Adams, a residence to cost $5,000. At Norwood, Minn., a school house of two rooms is going up here, 40 by 50 feet, to cost $8,000. At Crookston, Minn., for F. W. Walker, a residence, to cost $10,000.

Architect W. A. Hunt reports having just completed plans for a dwelling for F. W. Nevins, on Ridgewood avenue, cost $3,800. A house for Mrs. L. A. Douglass, on Tenth street between Nicollet avenue and Mary's place, cost $2,500.

Architect J. H. Haley reports three stores, 66 by 100 feet, three-story, on Washington avenue and Ninth avenue south, cost $20,000. House for W. Davidson, on Portland avenue and Twenty-first street, cost $3,500. A three-story building of red pressed brick and Ohio sandstone, for F. L. Meldel, 44 by 75 feet.

Architect C. F. Struck reports a block on High street, opposite Union depot, 55 by 75 feet, four-story, of pressed brick and stone trimmings, $20,000, for A. Von Ender. A block on Plymouth avenue and Washington avenue, for Peter Rauen, Fritz Freidrich, and Louis Mester, size 120 by 112 feet, cost $45,000. The Harmonia block on Second avenue south and Third street is nearly completed.

Architect F. G. Corser has in hand a three-story building, brick, on Nicollet Island, 60 by 80 feet.

Carl Peterson is building six houses, to cost about $1,000 each, on Franklin place, between Twenty-second and Twenty-fourth streets.

Irving A. Speer is to build an eight-room house costing $3,000, on the corner of Fifteenth avenue southeast and Sixth street.

William Muther is the architect of a $1,800 house for Julius Grosse, on Lyndale avenue, between Lincoln and Summit streets.

E. C. Webster will build a $1,500 house on Lyndale avenue, between Thirty-first and Thirty-second streets.

Engine houses Nos. 1 and 2 are undergoing alterations involving a cost respectively of $1,500 and $2,000.

Campbell Bros. are building a $3,800 house on First avenue south, between Twenty-ninth and Lake streets; also, a two-story, ten room, wooden building and barn, west side of First avenue south, between Twenty-ninth and Thirtieth streets, cost $3,800.

E. C. Webster, two-story seven room dwelling and barn, west side of Lyndale avenue, between Thirty-first and Thirty-second streets, cost $1,650.

Samuel Simpson, two-story nine room wooden dwelling, northeast side of Sixth street, between Fourth and Fifth avenues south, cost $2,000.

Fred Dumas, west side Seventeenth avenue south, between Eighth and Eighteenth streets, addition to dwelling; cost $2,000.

James McMullen, Fourth street, between Sixth and Seventh avenues southeast, one-and-a-half-story dwelling, cost $3,800.

The Monitor Plow Works have just erected a handsome business block on Third avenue north and First street. It is four-story, has a frontage of 50 feet, is handsomely and strongly built, and contains elevators, fire-proof vaults, and other modern conveniences.

The corner stone of the new building of the Minnesota Loan and Trust Company was laid with appropriate ceremonies. There was deposited in the stone a prospectus of the Company and a copy of the law under which it was organized, the names of the building committee and architects, samples of American coin now in use, and of the Company's stationery. Quite a number of gentlemen were in attendance.

A. J. Finnegan has commenced work on his new block on Hennepin avenue, between Third and Fourth streets. It will be of brick, three stories high, and cost $13,000. There are party walls on either side, and the building will be put up rapidly.

Clark & Withers have commenced the erection of a two-story store building on Hennepin avenue, between Fifteenth and Sixteenth streets.

Dr. A. H. Salisbury is to commence at once upon a $5,000 house he will build on Highland avenue in Oak Lake.

M. H. Crittenden is to build a $5,000 house on Nineteenth street, at the head of Spruce place.

Mitchell, Dak.—Architect H. J. Bingham reports: Have sketches for a block of six stores to fill the burnt district, two of which will be built at once, and perhaps the whole block, if any agreement can be made for two of the lots now held by lease. The proposed stores will be 25 by 100 feet, two stories high, with pressed brick and artificial stone fronts. Work on the new school building is about finished. The C. M. & St. P. R. R. Co. are building a fourteen-stall round house, with turn table and necessary fixtures, and propose building a repair shop, 60 by 80 feet.

Neillsville, Wis.—There has been a steady increase in building since the season opened, and now there is considerable being done, and it will be brisk until cold weather sets in.

Architect E. S. Hart reports: For Mr. J. L. Gates, one-and-a-half-story frame dwelling, 20 by 29 and 12 by 14 feet. Three bay windows, Queen Arne style, cost $1,500. For Presbyterian Society, at Greenwood, Wis., frame church building, 27 by 46 and 9 by 9 feet, cost $2,000. Also addition, 10 by 27 feet, and front, to "Fireman's Hall," at Neillsville, cost $2,500. All the above work commenced in October.

New Orleans, La.—Outlook uncertain.

Architect Jas. Ferret reports: For John McCloskey, three-story brick store building, 25 by 70 feet, cost about $4,000; under way; Ed. Murray, contractor. For Mrs. C. Sterry, three double frame cottages, each 26 by 78 feet, cost $11,700; under way. For Jno. H. Adams, double frame cottage, 26 by 78 feet; cost $3,000; contract let to J. Hoefeld. For H. J. Vose, two-story addition to frame dwelling, 13 by 30 feet, cost $1,200; under way. For A. Duuer, one-story addition to dwelling, 15 by 26 feet, cost $700; under way. Brick chapel, 43 by 90 feet, cost about $8,000; plans ready.

North Springfield, Mo.—Outlook for building good.

Architect S. B. Abbott reports: For J. Pfaff, three-story brick hotel building, at Pierce City, Mo., 150 by 100 feet, cost $40,000. For M. A. Morly, at Ft. Scott, Kan., three-story business block, 150 by 125 feet, cost $20,000; under way. For A. M. Sombest, residence 30 by 60 feet, cost $2,500; under way. Also projected, business blocks for John Wall and Geo. Smith, and residences for C. Chester and C. Sprinkle, and several other buildings. Weather fine and warm.

Omaha, Neb.—Building not very brisk; outlook for fall not flattering. A number of buildings projected for next spring.

Architect Sidney Smith reports: For Mr. John Ledwick, three-story brick store building, 22 by 60 feet, cost $4,000; projected. For Mr. John W. Thomas, two-story brick and frame double dwelling, 36 by 56 feet, cost $8,000; under way; Mr. Campbell, builder. For Mr. J. B. Kitchen, two-story brick barn, 32 by 70 feet, cost $2,800; projected. For Dr. Merser, two-story brick barn, 46 by 56 feet, stone trimmings and slate roof, cost $6,000; under way. For Cass County Banking Co., two-story brick and stone building, 22 by 70 feet, cost $8,000; under way. For H. Esterbrook & Co., three-story brick store and apartment block, 60 by 132 feet, cost $30,000; projected.

Pierre, Dak.—The work of rebuilding the burnt district has commenced. Seven brick buildings have been started which are intended to be finished before winter sets in. Business men who were completely burned out are getting established in temporary quarters, and the city's affairs are again moving along quite regular. The First National Bank has removed to its new brick block and are now doing business regularly. Col. Ordway will at once commence the erection of a brick block where his building formerly stood. Architects Proudfoot & Bird report the following: Presbyterian University, cost $20,000; E. Bailee, architect. Court-house at Huron, just finished; Charles Cook, of Winona, architect; cost $37,000. Court-house at Pierre, Proudfoot & Bird, architects; cost $35,000. First National Bank, Central Block, and Korcher Building, Froudfoot & Bird, architects; aggregate cost, $25,000. School-house and Congregational church at Ashton, Dak., Proudfoot & Bird, architects; cost $7,000.

Richmond, Ind.—Business dull; outlook uncertain.

Architect John A. Hasecoster reports: For Mr. Adam H. Bartel, three-story brick building, 28 by 95 feet, to be used as a wholesale house; cost $6,000; under way; H. Bartel & Co., builders. For Mr. John B. Dougan, remodeling brick and stone residence; cost $3,000; under way; Thos. W. Roberts, contractor. For Mr. P. W. Moore, at Logansport, Ind., brick residence, stone trimmings and slate roof; cost $7,000; under way; Mr. Doulap, builder.

Rochester, Minn.—The Brackenridge building, opposite Heaney's Block, on Broadway, is under cover, and the inside work is being hastened to completion before cold weather.

Sauk Rapids, Minn.—The new Benton County Court-house has been completed and is now occupied by the county officers. It is two stories high and 40 by 65 feet in size.

Shawneetown, Ill.—Present condition dull. A number of buildings projected, among them the new Union Depot, to cost $65,000, and the new Public Library building.

Architect James B. Alexander reports: For J. R. Loomis, M. D., three-story and attic residence, 42 by 63 feet, walls of St. Louis pressed brick, roof of variegated slate, to cost upwards of $9,000; projected; Blackwell & Rossolow, builders. For Prof. C. W. Allen, two-story and mansard store house, 26 by 104 feet, Evansville Niagara pressed brick, galvanized iron front, plate glass, etc., to cost about $7,000; under way; Geo. Peeples, contractor.

St. Louis, Mo.—Architect A. Druiding reports building in general very dull. Wages will be reduced soon because of scarcity of work. Bricks laid in wall at $10.50 for common jobs. Plans for St. Agatha Catholic church, 60 by 117 feet, Gothic style, tower 150 feet high, cost $26,990. St. Boniface Catholic church, Manitowoc, Wis., 63 by 135 feet, tower 168 feet high, addition for winter chapel, cost $28,000; foundation under way; Berah Meerbaum, builder. L. Mette, two houses, 50 by 74 feet, cost $7,500. Making plans for boarding-school to cost $7,500.

Architects A. Grable & Co. report: Business dull during summer, but rushed with work since September 1, and working eighteen hours a day, and business almost wholly the better class of work. A reduction of fully 20 per cent in prices of material and labor has given an impetus to their business, and they look for still larger demand after election, and buildings as follows: For Louis Bernheimer, two-story, stone and brick, slate roof, Norman renaissance, 35 by 70 feet, cost $14,000; under way; Goesse & Remmers, builders. Aug. Eichele, two-story, brick, slate roof, 20 by 60 feet, cost $5,000; A. Uhrie & Son, builders. Mrs. Clymer, three-story, brick, mansard roof, 22 by 52 feet, cost $4,000; N. L. Wichevire, builder. Miss Mary A. Boyce, alteration of buildings, cost $5,000. James Lupe, Atlantic Coast, Florida, two-story frame, 30 by 75 feet, cost $5,000. James H. Rollins, Columbia, Mo., alterations in dwelling, cost $4,500. Andrew Uhrie, three-story, stone and brick, classic renaissance, 25 by 65 feet, cost $7,000; A. Uhrie & Son, builders. Given Campbell, two-story, high roof, basement, pressed brick and stone trimmings, extensive and elaborate porches, antique renaissance, 60 by 73 feet, cost $20,000; Strimple & Son, builders. All of the above are under way, and plans for the following, projected: James Shorb, alterations to building, cost $3,500. John Goetten, two-story, high roof, pressed brick, stone trimmings, antique renaissance, 40 by 73 feet, cost $16,000. D. K. Ferguson, three-story brick building, 47 by 75 feet, cost $6,000. H. Schaub, three two-story brick aud stone buildings, 22 by 52 fect, cost $10,000. J. C. McClanahan, residence, 22 by 60 feet, brick and stone, cost $4,500. M. A. Rosenblatt, two-story, brick and stone, high slate roof, Byzantine renaissance, 60 by 80 feet, cost $20,000.

Architect Charles F. May reports: The present condition quiet, but outlook for next spring good, and the following work: For William Presfrock, two-story brick office, 30 by 30 feet, cost $3,000; Biermann & Ahring, builders. Aug. Fitzel, three-story, stone residence, 24 by 55 feet, cost $6,000; under way; Albert Koester, contractor. I. G. Baker, three-story brick residence, 22 by 63 feet, cost $10,000; under way. Wm. Sturrock, two-story stone tenement, 44 by 50 feet, cost $8,500; under way; Biermann & Ahring, contractors. Boehmer & Stranghoener, two residences, two-story, each 25 by 55 feet, cost $6,000; Louis Yaeger, contractor. Mt. Olivet Lutheran church, brick and stone, 44 by 80 feet, cost $16,000; C. F. May, contractor. Projected: For H. W. Schnetz, two-story brick residence, 23 by 50 feet, cost $4,000; William Simon, two-story brick residence, 25 by 60 feet, cost $6,000; Ph. Riechers, two-story brick residence, 25 by 54 feet, cost $5,000; F. Stock, two-story brick residence, 24 by 67 feet, cost $5,000; A. M. Manewall, two-story brick residence, 30 by 62 feet, cost $9,000.

Architect J. Beattie thinks outlook fair for next season, and reports three new buildings, two-story, and two-story addition to frame residence, all for J. A. Pozzoni, aggregate cost $12,000; Chas. Hahn, contractor; and, for Tiffany estate, a four-story brick store building, 100 by 70 feet, cost $30,000; projected.

Mr. Bryan Brady, builder, is erecting a $9,000 fire-engine house between Second and Plum streets, to be completed by the fifteenth of November; also a two-story, ten-room house, corner of Wash and Twentieth streets, for Peter Finan, cost $3,500. He informed a reporter that the city is to receive bids for building, at once, two more engine houses—one on St. Charles Rock Road and Taylor avenue, and one on Spruce street, between Twelfth and Thirteenth streets.

Mr. S. H. Hoffman, builder, is putting up a $10,000 residence on Delmar avenue for himself, to be rented, and a frame cottage on Taylor avenue and the Narrow Gauge Railroad, to be occupied by himself. He has recently built two houses for H. Eliot, Jr., and one for W. P. Sharks.

Messrs. Klute & Hillebrand, builders, are erecting three six-room houses on Morrison avenue, between Tenth and Eleventh streets, to cost $4,000 each. They have just completed a neat cottage at Meramec Station.

Mr. Wm. J. Baker, builder, has in course of erection thirteen houses in different parts of the city for others, and three for himself.

Architect C. K. Ramsey has completed plans for a $5,000 frame residence in Queen Anne style, for Mr. Lincher, of the Wabash Road, to be located in the west end.

The extensive and costly buildings which Mrs. Ames intends putting up on the northwest corner of Eighth and Locust streets, opposite the custom house, will be erected this and next year; and will be thoroughly fire-proof, of a fine style of architecture, and may cost $200,000.

Drummond's tobacco factory, on the old Sisters' Hospital lot, at Fourth and Spruce, will have an ornamental cut-stone cornice. It will be a magnificent piece of work, costing $3,500 alone. Architect Isaac S. Taylor says it is very expensive, but that its beauty and durability will be equivalent to the cost. The finest finished of the granite used in the columns on the Fourth street front is now being rapidly put in place.

It is understood that Mr. Moses Fraley contemplates the erection of a magnificent residence on the southwest corner of Grand and Washington avenues. As no plans for it have been found in any of the resident architect's offices, it is presumed that they are being, or will be, drawn in the east. The structure will be an ornament to St. Louis, and will, it is said, cost $40,000 or $50,000.

The McElfatricks are still working on the plans for the San Antonio, Texas, Opera House, and will have them completed and ready for inspection next week. The building is to be of considerable size, and will cost $50,000.

Sioux Falls, Dak.—Architect W. L. Dow reports: For Messrs. Sherman & Richardson, two-story brick store building, 44 by 80 feet, cost $8,000. For City of Sioux Falls, two-story and basement brick school-house, 32 by 58 feet, four rooms, cost $7,000; under way. For Crossman Bros. & Co., at Dell Rapids, the "Union Block," two-story and basement stone building, 67 by 80 feet, cost $9,000; under way. For Bishop Hare, Episcopal school building, two-story, basement and attic, 52 by 125 feet, cost $25,000; under contract. For F. W. Taylor, two-story frame dwelling, 40 by 65 feet, cost $6,500; under contract; S. McCormick, contractor. For Burdick & Bowman, at Vermillion, Dak., two-story brick business block, 50 by 80 feet, cost $7,500; under contract; George Porter, contractor. For City of Vermillion, City Hall, brick with iron roof, 50 by 80 feet, cost $9,000; under contract. For W. F. Wiley, Commercial Hotel, three-story and basement, stone and brick veneer, 70 by 100 feet, cost $40,000; completed.

Bishop Hare contemplates the erection of a $10,000 residence at this place next spring. The corner stone of the new Episcopal College was laid Sept. 11; work is rapidly progressing. The contract for the new brick school-house to be erected here has been awarded for $6,421.50. O. W. Barnes, of Minneapolis, has been awarded the contract for building the new Presbyterian Church edifice on Ninth street. The new mansard roof is on the Baptist College, which makes it virtually a four-story building.

Springfield, Ill.—Present condition dull. But the outlook for next season is good, and it is generally believed that a better class of buildings will be erected; several fine residences and business blocks are already projected.

Architects Bullard & Bullard report: For Y. M. C. A., three-story brick block, 52 by 152 feet, stone trimmings, tin and slate roof, cost $30,000; walls up to second story; Rhodes Bros, contractors. For Mr. Charles P. Kane, two-story frame dwelling, cost $3,000; just completed; J. E. Powell, builder. For Dr. J. N. Dixon, two-story frame dwelling, cost $3,000; being finished; J. E. Powell, builder. For Mrs. J. North, two-story frame dwelling, cost $3,500; under way; Mr. Hartsok, builder. Also an Opera House block for Mr. J. H. Yureman at Virginia, Ill. The building is 60 by 120 feet, built of pressed brick, with stone and encaustic tile trimmings, cost $12,000; being enclosed; J. F. Black, builder. Also several dwellings and one business block projected for next year.

St. Paul, Minn.—There are a number of large residences in the suburbs about commencing, and a large number of additions and alterations being made to present structures. It is estimated there will be five new and handsome churches commenced in the early spring of 1885.

Architects Millard, Ulrici & Eltzner report a residence for Jos. McKee, on Jasette street, near Nelson, cost $6,000. A house for W. J. Sleepy, on Day avenue, near Mackubin street, cost $4,000. House for Jas. Rothschild, on Summit avenue, near Wabasha, cost $4,000. German Evangelical Lutheran Trinity Church, corner Wabasha and Tilton streets, cost $20,000.

Architect Brinckerhoff has in hand a three-story and basement building, of brick, at West St. Paul. Work on the new Union Depot is being pushed rapidly forward. The new baggage and express warehouses are assuming proportions and will soon be under cover, which, when finished, will greatly relieve the heretofore crowded depot. The tower of 150 feet, and the flanking towers on the corners of the new depot will be a great improvement over the old structure. The west side Opera House Syndicate have secured ground for their new building on the corner of State and Susan streets, and construction will be commenced at once.

Work on the new shops of the St. Paul & Northern Pacific, near Lake Como, has been commenced, and will be pushed rapidly to completion.

Kenney Bros. will erect a brick block of five stores on the corner of Seventh and Bradley streets.

J. Desjardins is to erect a block of three-story brick stores on St. Anthony avenue, between Kent and Dale streets.

Among the permits issued recently are the following: Marcella Deavitt, two-story brick block of stores and dwellings on northwest side of West Seventh, between James and Randolph, $5,000. Dennis Ryan, one-story brick boiler house, between Sixth and Seventh, on Robert, $5,000. R. C. Wiley, two-story frame double dwelling house on south side of Pleasant, between Ramsey and Forbes, $6,500. Jacob Mainzer, two-story frame dwelling on west side of Oak, between Sixth and Ninth, $8,000. Wisconsin Central Railway Company, one-story freight house, 300 by 30 feet, north side of East Third street, between John and Willius streets, $5,000. Liedertafel Singing Society, frame

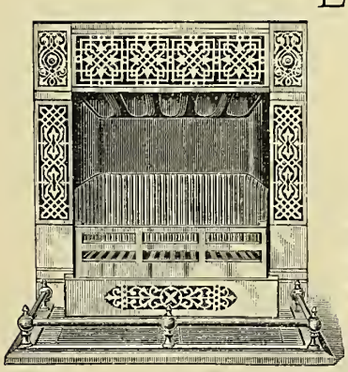
(*Continued on page 60.*)

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating

GRATE.



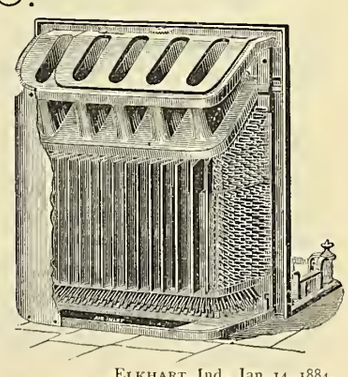
WASHINGTON, D.C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.



ST. PAUL, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. *Dear Sirs:* Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,
CHARLES E. LEE, M.D.

ELKHART, Ind., Jan. 14, 1884.

E. A. JACKSON & BRO., New York. *Gents:* The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the cannel coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,
F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

hall, 45 by 100 feet, east side of State street, between Susan and Winifred, $8,000. E. M. Van Duzee, two-story frame dwelling on east side of Wabasha, between Thirteenth and Bluff, $4,500. Bertha Theobald, two-story frame block of dwellings on northwest side of Pleasant, between Walnut and Western, $6,000. S. Rochette, two-story brick double dwelling on West side of Cedar, hetwcen Thirteenth and Fourteenth, $5,000. H. J. McAfee, two-story frame double dwelling on north side of Selby, between Mackubin and Kent, $4,075. W. F. Sleppy, two-story frame dwelling on north side of Dayton, between Mackubin and Kent, $4,500.

Stillwater, Minn.—The work of restoring the penitentiary progresses satisfactorily. The plastering has been completed, hardwood floors are being laid in the hospital, chapel and other departments, and everything being done to complete the work at an early date.

Tiffin, Ohio.—Architect F. K. Hewitt reports: For Charles H. Baldwin, two-story brick and stone residence, slate roof, cost $6,000; about completed; Jacob Sheely, builder. For R. G. Whitlock, two-story brick factory building, 58 by 112 feet, iron roof, cost $7,500; about completed; F. B. Lutz, contractor. For Republic, Ohio, Town Hall and opera house, two-story brick, with stone trimmings, tin roof, 44 by 78 feet, cost $7,000; Chamberlain & King, contractors.

Topeka Kan.—Architects Haskell & Wood report: For Samuel T. Murphy, at Emporia, Kan., residence, to cost $4,000; under way. A church building at Wellsville, Kan., cost $3,500; under way. For Messrs. Gillett & Ford, at Emporia, store building, cost $10,000; under way. Residence for Mr. S. Kaufman, at Garnet, Kan., cost $3,800; under way. Also Opera House block for same party, to cost $15,000; under way. Residence for Mr. Wildon, at Dodge City, cost $10,000; under way. Addition to packing house at Topeka, cost $10,000; under way. Messrs. Haskell & Wood took second premium in the New Mexico Territorial Capitol competition, on the 10th inst.

Vermillion, Dak.—A Catholic church and parochial school is to be built next spring at this place.

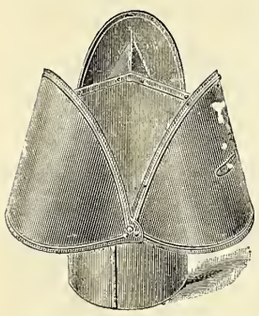
Winona, Minn.—Mr. Charles Miller has commenced the erection of a brick block 60 by 100 feet in size and two stories in height.

Yankton, Dak.—Architect E. A. Cobby reports the following: Yankton's Pork House is ready for the roof, which will be put on in a few days. C. F. Raustacher's Brewery is almost ready for the roof. Yankton's new Postoffice Block is being rapidly pushed to completion. The fine residence of J. R. Sanborn is having its finishing touches put on. Mr. Joseph Bader is putting up a store on Broadway, 25 by 70, two stories and basement, the upper story to be used for offices; the front of pressed brick, with galvanized iron trimmings. Mr. Cobby has completed plans for a school house at Hurley and also at Centreville, in Turner county, each costing about $4,000. He has also on the boards plans for a new Congregational church at Yankton, to cost $20,000. This building will be commenced next season, and will be built of Yankton pressed brick with stone trimmings. It will have a seating capacity of 1,000, besides the Sabbath school rooms which will adjoin the building. The new reservoir and water works is nearly completed.

Zanesville, O.—Very little new work will be commenced before next season.

Architect Henry C. Lindsay reports: For Mr. Wm. Lilienthal, six-room frame cottage, cost $2,500; under way; W. S. Frazier, builder. For Mr. John Spaulding, seven-room frame dwelling, cost $3,000, and barn, 36 by 70 feet, cost $1,000; under way; W. E. Nelsbaum, builder. For Mr. H. G. O. Cary, frame cottage, cost $3,000; under way; G. W. Turner, builder. For Mr. John Heinley, frame cottage, cost $1,800; under way; G. W. Walter, builder. For Mrs. G. W. Townsend, frame cottage, cost $1,500; under way; Wm. Griffith, builder. For I. O. O. F. at Chandlersville, O., lodge building, 36 by 64 feet, cost $4,000; under way; Heidman & Co., builders. For Mr. Chas. H. Towson, at Lancaster, O., frame residence, cost $3,500; under way; Theodore Hyle, builder. For Woodlawn Cemetery, at Zanesville, stone vault capacity for 144 caskets, cost $6,000; under way; Geo W. Kerner, builder. Also three small cottages for Spangler & Finley, cost $1,000 each; under way; W. Handshe, builder.

Architect Thomas Sully reports: For Mr. Lemangi, two-story brick and frame residence, 30 by 60 feet, cost $3,200; under way; Mr. Castan, builder. For Mrs. Anderson, two-story frame dwelling, 40 by 50 feet, cost $2,600; under way; Mr. Flye, builder. For J. J. Tanner, remodeling old building on Carondelet street, cost $4,000. Also several repair jobs and several large buildings in view, one of which is projected for Exposition Park.

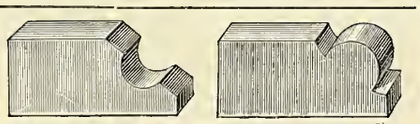


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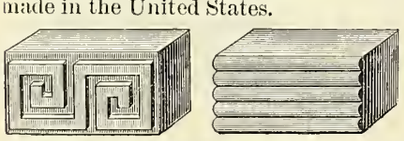
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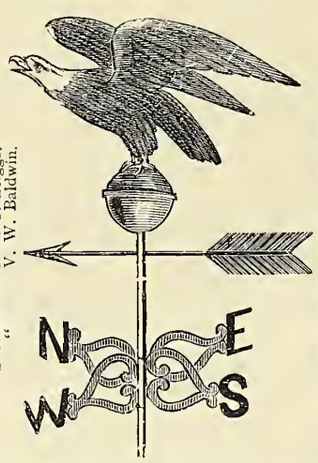


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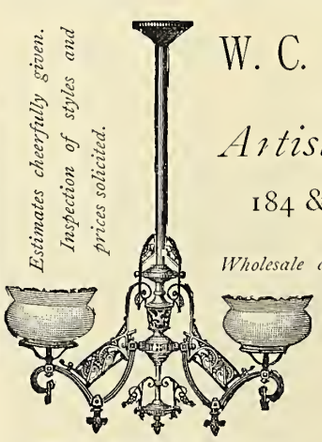
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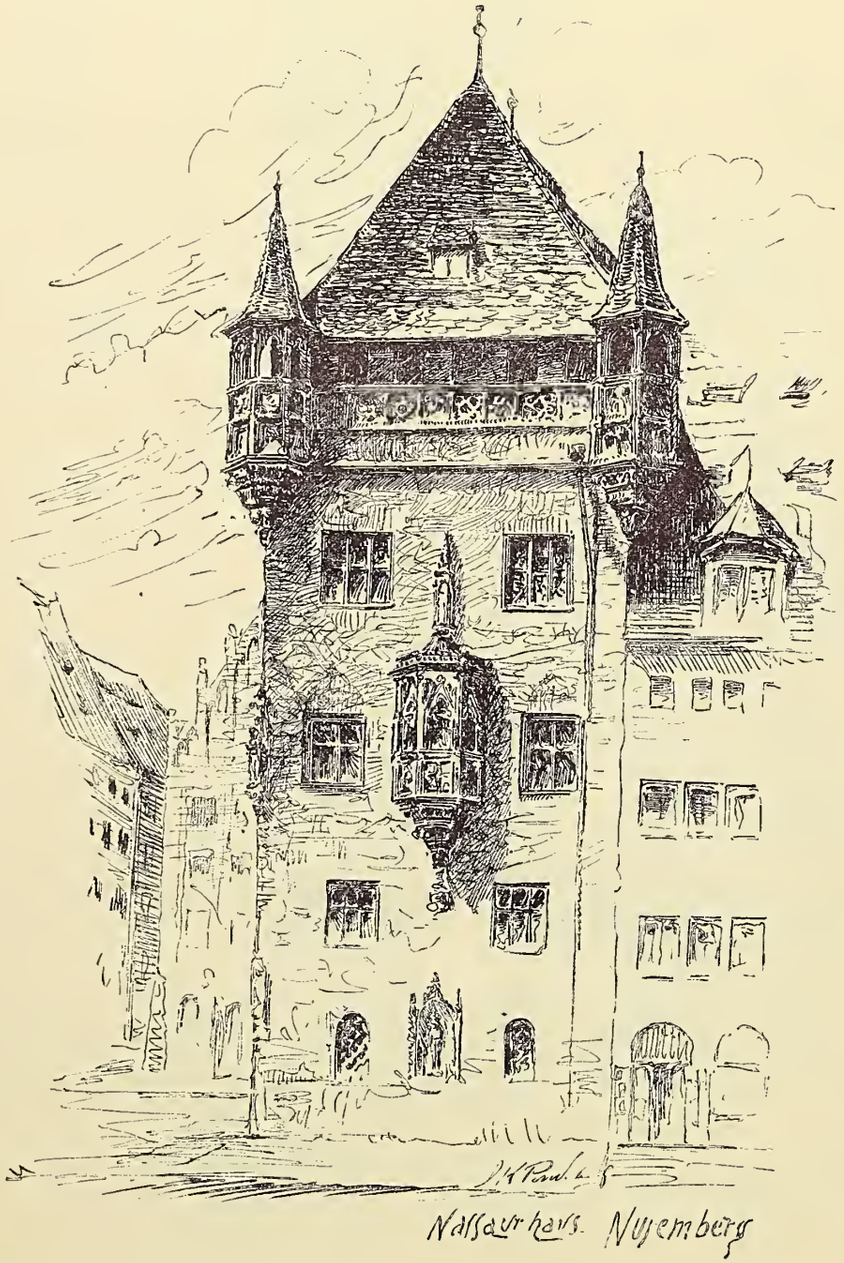
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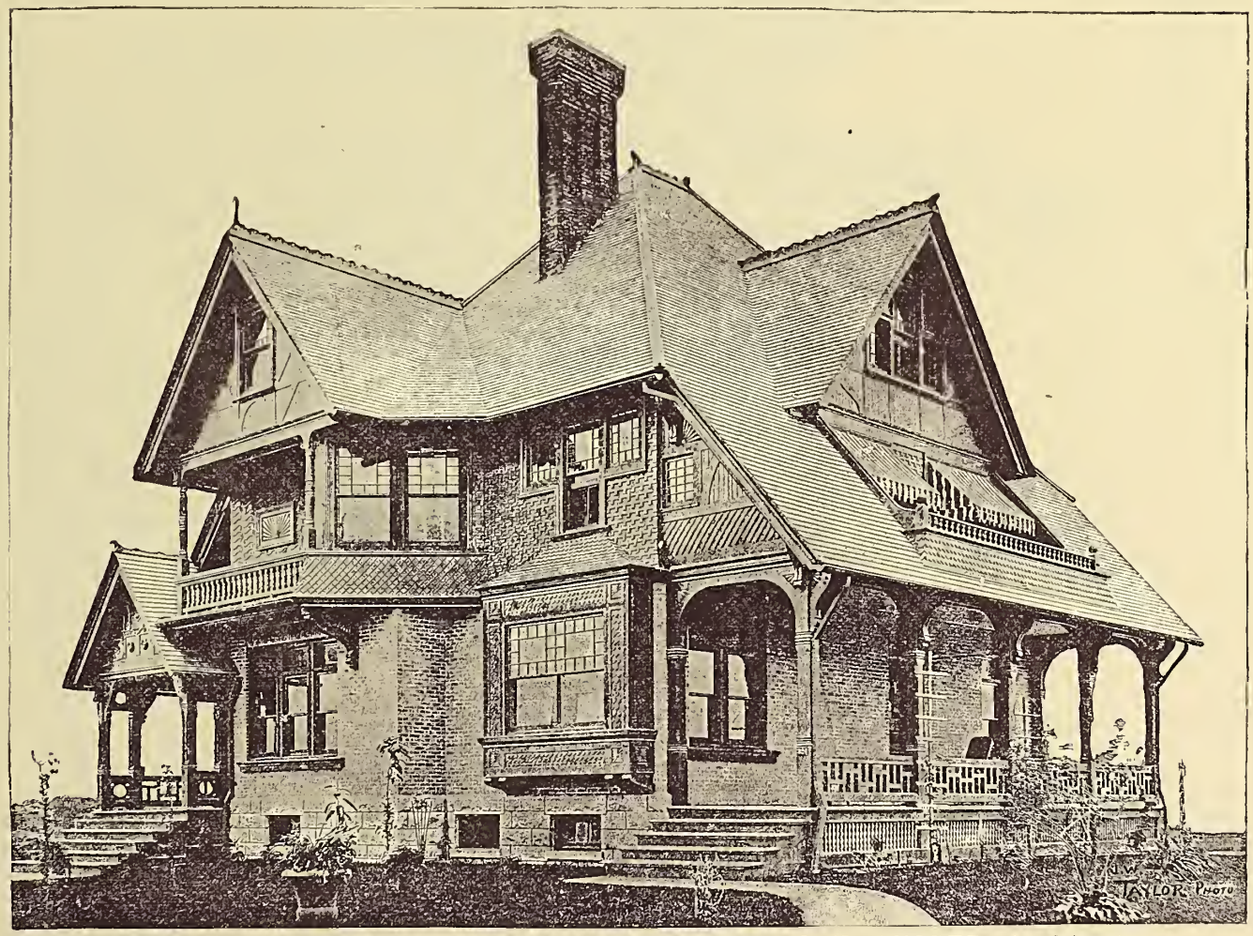
A few Notes on Foreign Churches.





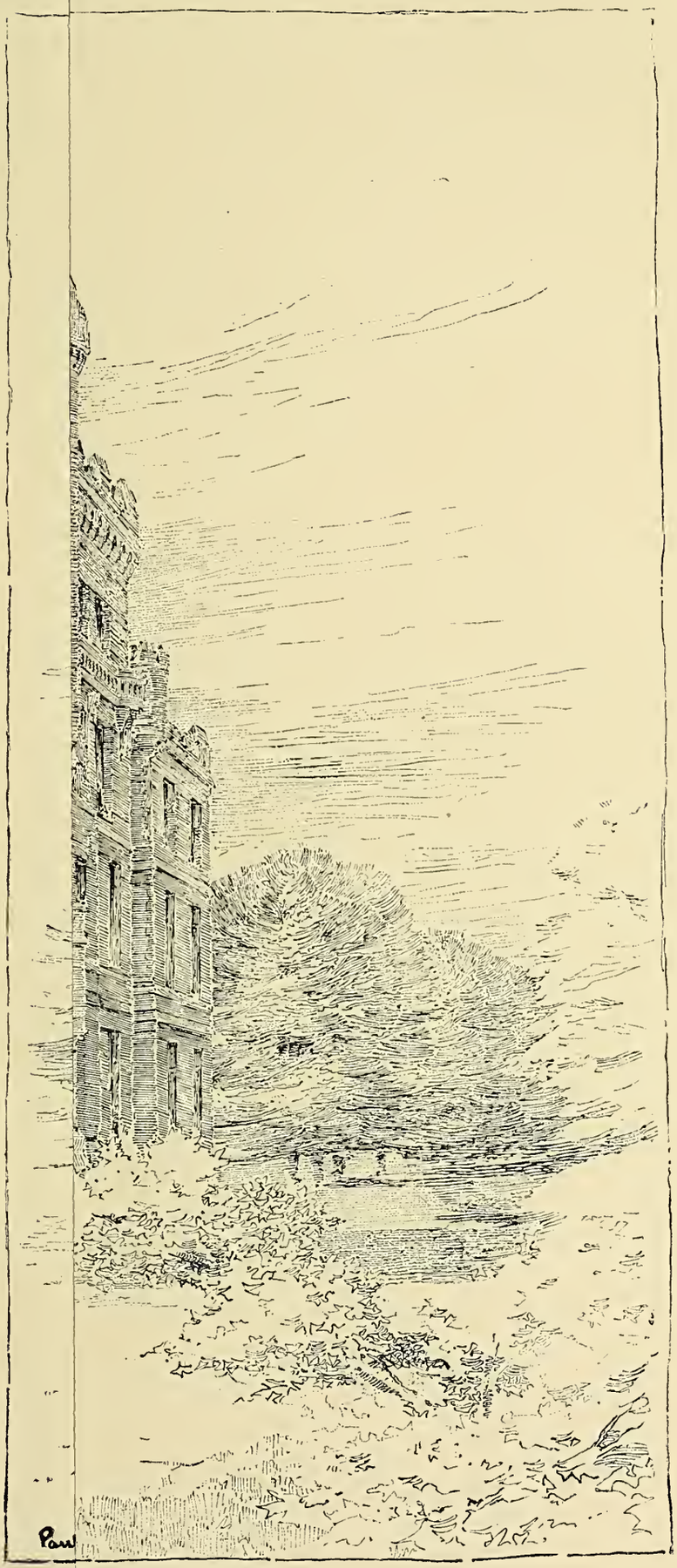


RESIDENCE FOR G. W. SPOFFORD, CHICAGO.—BURNHAM & ROOT, Architects.

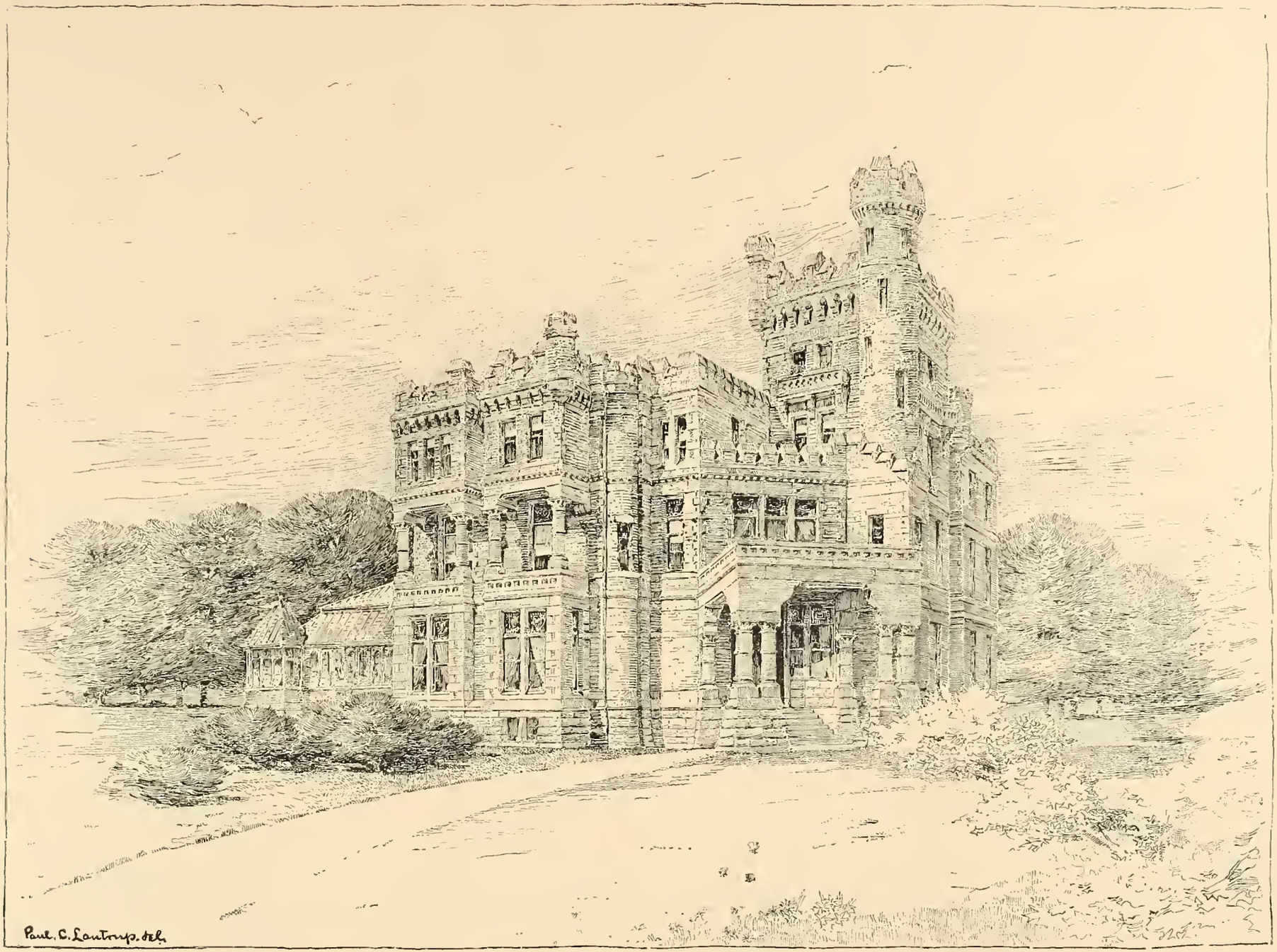


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The Inland Architect and Builder.

Vol. IV. CONVENTION SOUVENIR. [EXTRA NUMBER.

NOVEMBER, 1884.

THE

INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

OFFICIAL ORGAN OF THE WESTERN ASSOCIATION OF ARCHITECTS

(A NATIONAL ORGANIZATION.)

PRICE $1.75 PER YEAR.

($2 FOR FOURTEEN MONTHS, IN ADVANCE.)

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.

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17 TRIBUNE BUILDING, CHICAGO, ILL.

DESIGNS which have been accepted to be built from, and which have unique and novel features are particularly valuable to us for illustration, and we sincerely hope that all our readers who have such plans will send them to us for publication. Artistically executed line drawings are best for reproduction by our process, and good *black* lines are required. Perspectives, the principal floor plans, and bits of the more artistic features of the more costly structures are desirable, but we also desire plans, elevations and details of the less pretentious but important buildings such as cottages, etc. Good care will be taken of the drawings and they will be returned after use. Every effort will be made to give all drawings the best possible reproduction. We earnestly hope our readers, by furnishing us good drawings of their best work, will help us in our aim to make our illustrations representative of the best productions of our architects.

OUR present issue is an extra edition publishing the proceedings of the convention of western architects, which met in Chicago on November 12th, 13th and 14th, inclusive. It is by virtue of a unanimous vote of that convention making THE INLAND ARCHITECT AND BUILDER the official organ of the Western Association of Architects, the official report of those proceedings, which will not be published in any other form by the association. Great care has been taken to report substantially the entire proceedings *verbatim*, and they are presented with the omission of nothing except a few unimportant discussions upon points of order, etc., which could have no effect upon the matter in hand. In making this journal their official organ, and its editors honorary members, the association has conferred an honor for which we are grateful, while the personal commendation of members of the profession has been ample compensation for the labor the preliminary work towards the convention necessarily entailed upon us during the past six months.

GENERALLY speaking the object of the convention was to consider the formation of an association; and besides the forming of a national association including in it a system of state associations the work of the convention centered in providing rules for the government of competitions, the establishment of commissions for professional service, and statutory revision of the building laws in the several states. In the first instance a committee was appointed, which reported a rule broad in scope and singularly equitable in its nature. In the second, the latest schedule arranged by the American Institute was adopted; and in the last a committee consisting of a member in each state was appointed to report in the future. These were the practical results, and added to them may be placed the benefits of more intimate social relations, and a larger acquaintance than has ever before existed among American architects. The year will be one of organization, and too much should not be expected by those who are watching the progress of the new association. The questions we have before us for solution are not new by any means; many of them have come before the profession in every quarter of the globe, and some have never been satisfactorily settled. Here while we have some questions that come to us in a form peculiar to our surroundings, and we cannot look for much aid from the experience of the older architectural bodies, it is still our duty to examine their methods and systems closely for such aid as they may give. The necessity for individual effort we would impress upon every member, for while the association has its officers and directors they are but the servants of the members, and upon those members should fall the faithful and persistent work which is every man's duty to perform, that the good that has been inaugurated may not prove ineffective through neglect.

THAT the action of the convention, in forming an association, will prove the initial step to one of those movements whose scope is as far reaching and broad as those expanding circles that spread upon the pebble-broken surface of the calm ocean, it does not require a prophetic mind to foresee. With the impetus the movement has received from being inaugurated by a conclave of representative members of the profession in that portion of the United States west of the Alleghanies, it effects should be widespread; and with the steady and systematic carrying out of the principles laid down by that convention, the profession in the West will work in harmony with higher aims than heretofore, and rise to a nobler and more honored plain. And this is not a too advanced view to take of this great subject. The architecture of the West has been far too empirical; its genius has been too confined, and its scope abridged by constant friction among the professions and the conventional following of old forms and methods. The fault may not have lain in a lack of organization, but a gaining of ideas and interests is certainly the remedy. We must, to begin with (for our first step is to thoroughly recognize that this is but a beginning), see that our lines are drawn broadly and our precepts few but plain and clear; easily to be read and understood by the humblest seeker after architectural honors and an honorable place in the profession. Let each member of the Western Association just formed feel that he is one of the founders of this great movement, and, recognizing the law of association, busy himself with the work of carrying it out in his own locality, so that when the year has gone and the association meets in St. Louis every state may report an association formed, and the members working in harmony.

THE CONVENTION.

The Official Report of Proceedings of the Convention of Architects which met at Chicago, November 12, 13 and 14, 1884.

THE WESTERN ASSOCIATION OF ARCHITECTS FORMED.

FIRST DAY.

Wednesday, November 12, 1884.

A convention of the architects of the West was held at No. 15 Washington street, Chicago, for the purpose of organizing an Association of Western Architects. Mr. R. C. McLean, of The Inland Architect and Builder, called the assembly to order, and nominated Mr. D. H. Burnham of Chicago as temporary chairman.

Mr. Burnham, on taking the chair, said: Gentlemen of the convention, I desire to return my thanks for the compliment you have shown me. There will be a necessity for a temporary secretary. Some gentleman will please nominate a secretary.

Mr. S. M. Randolph, of Chicago, nominated Mr. Henry Ives Cobb, of Chicago, as temporary secretary, which was carried unanimously.

COMMITTEE ON CREDENTIALS.

The Chairman: Gentlemen, the first thing in the order of business will be the appointing of a committee on credentials. This being an entirely new thing, there must be an examination of the names of both the men from this city and those who come from the outside, and I think a most necessary thing will be the appointment of this committee.

Mr. C. A. Dunham, of Burlington, Iowa: Every member that has come here has had a card, and I do not see the necessity of appointing a committee on credentials.

The Chairman: The question is open for discussion. The body is not permanently formed, of course, until it is ascertained who shall compose the membership of it. I presume every gentleman in the room will become a member, but it is the usual order of business to go through the formality.

Mr. S. M. Randolph, Chicago: I move that the register be brought in here, and that the names of those that have already registered be read aloud, that we may know who are here and what cities are represented.

Mr. Dunham: And the residence too, if you please.

Mr. Randolph accepted the amendment.

Mr. E. O. Fallis, Toledo, Ohio: I move that each gentleman answer to his name as it is called.

The motion as amended was agreed to.

The register of visiting architects was read by Mr. McLean, the list being here omitted as the corrected list is published elsewhere.

The Chairman: Gentlemen, I still think the better way to do this business will be to have the matter referred to a committee for the purpose. There are some remarks passed into the hands of the chairman which he does not deem it advisable to state to the convention. They are properly in the province of a committee sitting in secret, and making a report to the convention for action. It seems to me that the business will be very much facilitated if that is done.

Mr. J. J. Flanders, Chicago: I move that the chairman appoint a committee on credentials to report to a future meeting.

The motion was carried.

The chairman appointed the following gentlemen a committee on credentials:

Isaac Hodgson, Minneapolis, Minn.; C. E. Illsley, St. Louis, Mo.; Eugene H. Taylor, Des Moines, Ia.; J. J. Flanders, Chicago; Henry Lord Gay, Chicago.

Mr. Fallis moved that the Editors of The Inland Architect and Builder be admitted to the floor, and to the deliberations of this meeting, without a vote.

Mr. O. L. Wheelock, Chicago, seconded the motion, which was carried unanimously.

Mr. McLean thanked the convention for the compliment on behalf of Mr. Louis Muller Jr. and himself.

Mr. Charles K. Ramsey, of St. Louis, Mo., moved that the convention adjourn till three o'clock P.M., which was carried.

The convention adjourned till three o'clock P.M.

AFTERNOON SESSION.

The convention re-assembled at three o'clock, Mr. Burnham in the chair.

The Chairman: The first order of business will be the reading of the minutes. It has been suggested that the purposes for which this convention is called, be mentioned in a general way. As that duty devolves upon the chair, after the reading of the minutes, I will ask your attention for a few moments, while I read a short address. The Committee on Credentials will probably be then ready to report.

The secretary read the minutes of the previous session, which were approved.

CHAIRMAN'S ADDRESS.

Chairman Burnham, then addressed the convention as follows: —

The advanced civilization we live in demands of us a line of action differing somewhat from what has gone before. Almost up to the present century an architect's work has been confined to some one building or set of buildings. In the earliest times the architect was the master builder, and often finished but one structure during his career. This has been true until within the last two or three hundred years. It was easy for him, comparatively speaking, to perform his task to the satisfaction of his client, and to leave a monument finished in every detail.

Today a man in active practice is expected to design everything, from a cottage to an ornamental public building. But from Bezaliel, who was designated by God to erect a tabernacle in the wilderness, down through Phidias and Vitruvius, John of Gloucester, Erwin of Steinbach, and Robert de Beverley, to Michael Angelo, an architect's work has been confined in narrow channels, and it may well be doubted whether these masters could have left a name had they been obliged, as we are, to turn from a temple or palace to a dozen other totally different problems, all in one year.

The times have changed, and we of today are loaded with such emergencies as were unknown to the ancients. This should give courage to him who is dissatisfied with his work, and if, in spite of the multiplex problems laid out for him, he succeeds in evolving one satisfactory building, he will have done quite as much as the architect of old.

It is of importance to us who make up that latest product of time, the architectural profession of the West, to recognize the great changes which have come over the practice of our business. We ask ourselves why ancient buildings were good. M. Viollet Leduc has shown, and I think justly, that the beautiful temple called the Parthenon was the result of constant and minute criticism of entire educated Athens. This shows the law of our nature, working toward a distinct end, for where there is a gathering of men, all intent on one purpose, the result must be the perfect expression of the work of them all.

Society today calls on us for a much wider range of thought than was formerly expected of an architect, but our social conditions cut us off from that peculiar help the old architects had from each other, and above all other things, we need today a restoration of the spirit of brotherhood which has been lost. We certainly are capable of doing more than those who went before, as we have their work before us, both in general and detail. We have photographs of their monuments as a whole, the colored prints of their interiors, and the scaled measurements of their most delicate parts. We have their writings, with the conclusions of their lives. With all these and our own facilities for perfect intercommunication which the men of old most sorely lacked, why is it we do so little which is thoroughly satisfactory, even to ourselves.

Haste, resulting from feverish push, is responsible for much. We are asked for complete results in a period which to the ancient would have been too short for his first conception. Were it not for other things there could be no satisfaction to the mind of an earnest man in doing his work, but in spite of our being so hurried by the rush of modern life we can guard ourselves against mistakes if we will, by analyzing our position. We all need kindly criticism. No man can be a law unto himself, and the best effort of the brightest intellect must be inferior to what it might be if the designer would submit his work to the scrutiny of others in his profession. We look to this convention to help bring this about by inaugurating an era of good feeling among the architects of the West. Recognizing our standing in the advance of civilization, we feel that combined effort could thus save to us and to posterity the best thoughts of us all; that working merely as individuals, entertaining a narrow, jealous disposition toward others, we cut ourselves off from those corrections which are absolutely essential to prevent such glaring flaws as inevitably come from haste.

It is not intended to claim extra brilliancy of intellect or warmth of heart for us of the West, but the conditions which invariably did produce perfect styles in the past are now once more active among us. What made the architecture of Athens? I have quoted from a celebrated French author to show that the results came from freely expressed criticism of the populace, but this itself arose out of what was far more potent. Athens was a commercial city. To it came men of all nations. At its port were seen the dresses of all tribes, and there were heard the tongues of the civilized world. From the very nature of things the Athenians were the brightest spirits of the times, and probably the best informed men then on the globe. The restless activity of their minds and their adventurous feelings had brought them from far divergent lands. They were animated to overcome every difficulty, to seek the great commercial cities of their day. The city was filled with individuals from the various countries around the Mediterranean, who were posted on science, arts and manufactures. Picture to yourself a humdrum countryman in Athens for a day or two. Must he not have been astonished at the quickness of mind of all about him; at the extent and precision of knowledge among sailors, soldiers, merchants and philosophers? The potency lay in the fact that every man's mind stimulated its neighbor.

Again, a few years later we find a similar set of circumstances producing the same result. Carthage arose, like a queen, from the sea; her towers and palaces were spoken of by the ancients only in terms of deepest wonderment. Again, Rome rose in all her magnificence and drew the choicest men and materials from the entire world; rare gems, colors in purple and fine linen, a manuscript of the past; but, above all, in her streets were found the subtle-minded Greek, the Gaul of scientific turn, and the sweetest poets of all countries.

Today we have this conglomeration of men, who make up our great West. More than the Athenians, the Carthegenians or the Romans, do we feel a spirit of enterprise; in a greater degree do we draw to our centers the thinkers of all countries. Here come determined, bold spirits, who, filled with ambitious dreams, have left their older homes in Germany, France, Italy, England, in the Orient, and in the older states of our own

country, all imbued with the same restless activity, the same readiness to give up the old when the new is better, the same fearless examination of everything laid before them.

We are without doubt all, in a certain sense, adventurers. Each man brings some knowledge peculiar to the land of his birth. Each one has the disposition to look upon things in accordance with the nature of his blood and the education of his province, and the community as a whole is thus constantly enriched with the thought of this steady stream of keen, incisive, thoroughly living men.

If we recognize this fact, and all of us determine to make the most of it, we must show a progress that will surpass anything which has gone before.

Our buildings must soon be the most practically original, if not the most beautiful, yet designed by man.

In short, we possess the whole past in a living form, ready to actively assist each and all of us in the struggle to eliminate crudities and to secure what is in accordance with the unchanging laws. No man among us can possibly possess more than a fragment of the knowledge of all, and if we would do the best with our lives, we must do the best for the community and the times we live in. This can be brought about by each one acknowledging his shortcomings and being willing to frankly and kindly accept the help of others, and still more, to give it in the same spirit himself. If there is a man amongst us who has an ambition to leave an honorable name, and I hope this is true of every individual, he may be sure he will fail of his object if he works for himself alone. There are many things undoubtedly to come up for discussion in the convention, which are peculiarly its province. I will therefore only mention a few, as, for instance, the schedule of fees, the code of professional ethics, and that frequent source of trouble, competitions. Remember that our science is a union of all sciences, and this to a degree that can not be said of any other profession; and that the great man is both a theorist and at the same time thoroughly practical; that we should be ingenious and apt to learn.

Recognizing this, it is hoped that an impetus will be given here which will carry us on to success and make our work better. It is not to be hoped, perhaps, that the name of each shall go down to posterity, but it may be hoped that the united efforts of us all will leave impressions which shall stamp a pure American spirit on the ages to follow.

Shall we teach this lesson of united effort in an honest, manly cause? The famous scientist whose philosophy crowns the thought of this century said in his few words of warning to Americans: "The duration of your institutions will depend, not on your education, but upon your character." Does not every one of us see that it is so, and hope with Spencer that the blood of our hearts may warm us toward the common good, and the thought of our brains be toward the accomplishment of our work as a whole, and not primarily toward the fleeting success of the individual, be it in finances or in popularity.

Mr. Hodgson of Minneapolis, Minn.: I move a vote of thanks to the chairman of this convention, for the very able address which he has just delivered.

Mr. W. S. Matthews, Nashville, Tenn., seconded the motion, which was carried unanimously.

The chairman, in acknowledging the vote of thanks, said: I shall be glad if I have succeeded in bringing you to the same feeling that I have. I have an abiding faith that that is the thing for us to do.

REPORT OF COMMITTEE ON CREDENTIALS.

Mr. Hodgson, from the Committee on Credentials, presented the following report:—

Mr. Chairman and Gentlemen of the Convention:

Your Committee on Credentials have the honor to report the following names of gentlemen who are entitled to a place on the floor, and a vote in this convention:—

The names are here omitted as a complete list is to be found elsewhere.

The Chairman: Gentlemen, you have heard the report of the Committee on Credentials, as far as it has gone. I suggest that the convention be constituted with the names already read, with the understanding that the Committee on Credentials might still go on with their work, and any additional names might hereafter be presented to this body in a supplementary report, for their acceptance or rejection.

Mr. Fallis: I move that the roll as just called by the secretary be accepted, to constitute the membership of this convention, with the understanding that the committee may report other names to be added to it, if in their judgment they shall see fit.

The motion was unanimously agreed to.

ELECTION OF PERMANENT OFFICERS.

The Chairman: The next order of business will be the election of permanent officers.

Mr. Hodgson: If I am in order, I move the name of Mr. D. H. Burnham, for permanent chairman of this convention.

Pending the discussion of nominations, Mr. Burnham vacated the chair, which was taken by Mr. S. A. Treat of Chicago.

Mr. Burnham: This is a very onerous duty for me. I am not acquainted with parliamentary laws and usages, and do not feel myself a competent man to discharge the duties of this office. I would prefer that you should nominate somebody else in my place.

Mr. Wm. Holabird of Chicago, nominated Mr. E. Townsend Mix, of Milwaukee, Wis., for permanent chairman.

Mr. John W. Root of Chicago: I second the nomination of Mr. Mix; because it would tend to give a cosmopolitan character to this assembly, which must tend to make it successful. I think Chicago men should not have too prominent a place in it. I think our work will be more successfully done if the permanent chairmanship is vested in some man of the standing of Mr. Mix, to represent the architects of a western association.

Mr. S. M. Randolph, Chicago: I offer a substitute, that a committee be appointed to report permanent officers. I do not approve, as a general thing, of committees selecting officers, and I should object to anything of the kind after this year; but as we are come together, unknown to each other in a great measure, I think it would be well that a committee should look the matter over carefully, and report officers.

Mr. W. E. Elliott, Elgin, Ill. seconded the motion.

Mr. Randolph: I suggest a committee of five.

Mr. Hodgson: Before putting the question, it seems to me that the first motion should be disposed of.

(Here followed considerable debate, in which Mr. Randolph offered a substitute, the chair, supported by Mr. Hodgson, deeming the first motion in order, and the statement by the chair that "the question before the house is the appointing of Mr. Burnham as permanent chairman." Mr. W. W Clay of Chicago, here rose to a point of order, which introduced considerable discussion, in which the chairman, Mr. Clay, Mr. J. J. Egan of Chicago, Mr. Burling of Chicago, Mr. H. I. Cobb and Mr. Randolph, took part upon the proper ruling of the chair in the matter, after which the motion of Mr. Randolph was put and carried.)

Mr. Burnham again took the chair.

The Chairman: Will the convention please state how the committee is to be formed?

Mr. Fallis: I move that the chairman appoint such committee.

Mr. Louis H. Sullivan, Chicago, seconded the motion.

The motion was unanimously carried.

The chairman appointed, as a Committee on Nomination of Permanent Officers, the following gentlemen: S. M. Randolph, Chicago; H. W. Kirchner, St. Louis; I. Hodgson, Minneapolis; L. S. Buffington, Minneapolis; L. D. Cleveland, Chicago.

A short recess was then taken.

Mr. Randolph, from the Committee on Nomination of Permanent Officers, reported as follows:

Chairman, D. H. Burnham, Chicago.

Secretary, Eugene H. Taylor, Des Moines.

The Chairman: Gentlemen, your chairman must beg leave to say once more that he was quite in earnest in his former request that his name be withdrawn from before the convention. I feel under a great disadvantage, because I am entirely ignorant of parliamentary law, and I am sure that the deliberations of this body will be greatly impeded if this position is not filled by a man more competent than myself.

Mr. Burnham again vacated the chair, which was taken by Mr. Henry Ives Cobb.

Mr. Randolph: I nominate Mr. Burling, of Chicago. I suppose nominations are now in order.

Mr. Burnham: If there is any doubt about that, I move that the report of the committee be adopted, except as to the names, and that we are simply ready to receive nominations.

Mr. Cobb: I have not heard Mr. Randolph's motion.

Mr. Randolph: I moved to substitute the name of Mr. Burling for that of Mr. Burnham.

Mr. Burnham: I second the motion.

Mr. Burling: Gentlemen, I feel very much obliged to you for the honor, but really I feel as though I must decline it, for the same reason, only in a greater degree, than what Mr. Burnham suggests. I think the influence of the society will be better promoted by choosing some one else. I am perfectly willing to give my time to the interests of the association, but feel as though I must positively decline this honor.

Mr. Patton: I move that the vote for permanent chairman and secretary be by ballot.

The Chairman: The motion before the house is Mr. Randolph's substitute of Mr. Burling's name in the report of the committee for that of Mr. Burnham.

Mr. Egan: It seems to me we have a report here from a committee formally sent to nominate a chairman to preside over this organization. I do not think there can be any doubt that that is the question for us to address ourselves to — the adoption or rejection of this report. That seems to me the clear status of the case. I move that the question on the adoption or rejection of the report be put before the house.

Mr. W. E. Elliott, of Elgin, Ill., seconded the motion.

Here followed considerable discussion participated in by Mr. G. M. Moulton, of Chicago, Mr. Egan, the chair, Mr. Clay, Mr. Randolph, and Mr. Normand S. Patton, of Chicago, in regard to the adoption or acceptance of the report which occupied much time, and the matter of nominations was again taken up.

Mr. Clay: I nominate Mr. Mix, of Milwaukee, for permanent chairman, and Mr. Taylor, of Des Moines, Iowa, for permanent secretary.

Mr. Hodgson: I saw Mr. Mix, and pleaded with him, and Mr. Mix said he could not, under any consideration, accept the office, and he would not.

Mr. Randolph: I think Mr. Mix went down stairs while we were out there, and went home.

Mr. Hodgson: It is no use wasting time on that.

Mr. W. H. Drake, of Chicago: I move that Mr. W. L. B. Jenney, of Chicago, be made permanent chairman.

The Chairman: A motion has been put and carried that we should

elect by ballot. Now, if there be no other nominations, we will proceed to ballot.

Mr. Randolph: Who are in nomination?

The Chairman: The nominations presented by the committee and the nomination of Mr. Jenney.

Mr. Clay: I nominated Mr. Mix, but I did so with a desire to have some person outside of Chicago in the chair; and that, also, is Mr. Burnham's wish. Of course, we should all be pleased to have Mr. Burnham in the chair. I understand that Mr. Mix is not in the city, and will not be able to attend this meeting. I therefore withdraw Mr. Mix's nomination. If there are no other nominations besides those of Mr. Burnham and Mr. Taylor, I would make a motion to elect them by acclamation.

Mr. McLean seconded the motion.

Mr. Clay: Of course, it is the wish of every architect in Chicago to have some person from outside in the chair, if there were only some gentlemen here to propose such a person.

Mr. Jenney: I agree with Mr. Clay that it would be preferable to have some person in that office outside of Chicago. I nominate James McLaughlin, of Cincinnati.

Mr. Clay: I second that nomination.

Mr. Hodgson: I would just say, as an outsider—I believe I can speak for all outsiders—that we have no feelings whatever, in regard to Chicago, except the very best, and would just as leave, and perhaps rather, see a Chicago gentleman preside over this convention as any other. We have no feelings in regard to Chicago except those of the very highest character. Mr. Burnham has presided in a very dignified way over this convention, and we thought it was only due to him to have him preside over the convention for the time being. It is not permanent; it is called permanent, but of course it is not for the ensuing year, and you need have no fear whatever as regards the outsiders. We are all perfectly willing to have some Chicago gentleman preside over this convention, and very glad, too. We are your guests, really.

(The question of the report was here further discussed, principally by Mr. Moulton, who suggested the short duration of the convention as a reason why the matter should be quickly settled.)

The Chairman: I understand Mr. McLaughlin's nomination has been seconded.

Mr. Jenney: I withdraw my name. I would much prefer to see somebody else in the chair.

Mr. Ramsey: Mr. Jenney having withdrawn, that still leaves the nomination of Mr. McLaughlin before the house.

Mr. Moulton: I understand Mr. McLaughlin is not in town. How can he act as permanent chairman?

Mr. Jenney: I will withdraw his name on that account. I supposed it was for permanent chairman of the association.

Mr. Ramsey: I move, as we have agreed to elect by ballot, that Mr. Randolph be instructed to cast a ballot for permanent chairman and secretary.

The motion was carried, and Mr. Randolph cast the ballot as follows:

Permanent Chairman: D. H. Burnham, Chicago.

Permanent Secretary: Eugene H. Taylor, Des Moines.

Mr. Burnham, on taking the chair, was received with applause. He said: Gentlemen, I feel very deeply grateful for the compliment that you have paid me. I will endeavor, in spite of my little acquaintance with the subject, to do the best I can. I feel profoundly that I am taking a very important place; that the deliberations of this body are sure to be of effect and that this incipient union of the architects of the Northwest will result in far more than any one of us, perhaps, can at present foresee. I am deeply obliged, gentlemen. (Applause.)

Mr. Taylor also thanked the convention for the honor conferred upon him.

ROLL OF MEMBERS.

The following are the members found on the complete roll passed by the Committee on Credentials during the convention:

A. DRUIDING, St. Louis, Mo.
E. O. FALLIS, Toledo, Ohio.
W. S. MATTHEWS, Nashville, Tenn.
JOHN W. ROOT, Chicago.
HENRY IVES COBB, Chicago.
E. H. TAYLOR, Des Moines, Iowa.
W. L. PLACK, Des Moines, Iowa.
C. H. LEE, Des Moines, Iowa.
J. F. ALEXANDER, Lafayette, Ind.
L. D. CLEVELAND, Chicago.
JEAN A. WEIRZBIENIECE, Chicago.
W. A. FULKERSON, Ced. Rapids, Ia.
S. M. RANDOLPH, Chicago.
J. B. LEGG, St Louis, Mo.
JAMES H. MOORE, Chicago.
F. M. WHITEHOUSE, Chicago.
NORMAND S. PATTON, Chicago.
J. S. MATTHEWS, Cheyenne, Wyo.
I. HODGSON, Minneapolis, Minn.
WILLIAM LONGHURST, Chicago.
GEO. WIRTH, St. Paul, Minn.
A. CUDELL, Chicago.
W. W. CLAY, Chicago.
O. L. WHEELOCK, Chicago.
PAUL C. LAUTRUP, Chicago.
D. H. BURNHAM, Chicago.
F. R. SCHOCK, Chicago.
F. D. HYDE, Dubuque, Iowa.
W. G. ROBINSON, Grand Rap. Mich.
O. J. PIERCE, Chicago.
S. J. OSGOOD, Grand Rapids, Mich.
PAUL S. LIETZ, Peoria, Ill.
JAMES O. HOGG, Hannibal, Mo.
C. A. DUNHAM, Burlington, Iowa.
CHAS. K. RAMSEY, St. Louis, Mo.
G. W. BULLARD, Springfield, Ill.
A. M. F. COLTON, Chicago.
ALBERT E. COBBY, Yankton, Dak.
C. H. OWSLEY, Youngstown, Ohio.
H. C. LINDSAY, Zanesville, Ohio.
C. A. CURTIN, Louisville, Ky.
J. J. EGAN, Chicago.
GEO. W. RAPP, Cincinnati, Ohio.
L. G. HALLBERG, Chicago.
H. W. KIRCHNER, St. Louis, Mo.
WM. HOLABIRD, Chicago.
J. MCDONNELL, Green Bay, Wis.
L. KLEDUS, St. Louis, Mo.
E. S. HAMMATT, Davenport, Iowa.
J. W. ACKERMANN, Chicago.
F. S. ALLEN, Streator, Ill.
C. O. HANSEN, Chicago.
JULIUS H. HUBER, Chicago.
HENRY F. STARBUCK, Chicago.
OTTO H. MATZ, Chicago.
SAMUEL A. TREAT, Chicago.
GEO. M. MOULTON, Chicago.
E. T. MIX, Milwaukee, Wis.
FRANKLIN P. BURNHAM, Chicago.
S. V. SHIPMAN, Chicago.
C. M. PALMER, Chicago.
W. L. B. JENNEY, Chicago.
JOHN N. TILTON, Chicago.
GREGORY VIGEANT, Chicago.
P. W. RUEHL, Chicago.
J. J. FLANDERS, Chicago.
C. E. ILLSLEY, St. Louis.
J. L. SILSBEE, Chicago.
M. H. PARKER, Coldwater, Mich.
C. C. MILLER, Chicago.
JAMES K. TAYLOR, St. Paul, Minn.
F. M. ELLIS, Marshalltown, Iowa.
A. SMITH, Chicago.
HENRY LORD GAY, Chicago.
GEORGE S. SPOHR, Chicago.
W. E. ELLIOTT, Elgin, Ill.
OSCAR COBB, Chicago.
C. S. FROST, Chicago.
THEODORE KARLS, Chicago.
WILLIAM STRIPPLEMAN, Chicago.
C. P. THOMAS, Chicago.
E. A. BURLING, Chicago.
L. B. DIXON, Chicago.
J. G. CHANDLER, Racine, Wis.
L. S. BUFFINGTON, Minneapolis.
R. E. SCHROEDER, Chicago.
C. C. KEMBLE, Pittsburgh, Pa.
ION LEWIS, Chicago.
R. F. THOMPSON, Youngstown, O.
WM. DAVELAAR, Milwaukee.
T. N. PHILPOT, Milwaukee.
WM. NIER, Kansas City, Mo.
LOUIS H. SULLIVAN, Chicago.
D. ADLAR, Chicago.
FRITZ FOLTZ, Chicago.
SIDNEY SMITH, Omaha.
F. L. CHARNLEY, Chicago.
HENRY W. HILL, Chicago.
C. L. STILES, Chicago.
L. G. QUACKENBOSS, Chicago.
LOUIS J. SCHAUB, Chicago.
ROBERT C. BERLIN, Chicago.
E. V. KOCH, Milwaukee.
CHAS. I. WILLIAMS, Dayton, O.
M. L. BEERS, Chicago.
F. G. CLAUSEN, Davenport, Ia.
PROF. N. C. RICKER, Champaign.
JOHN C. COCHRANE, Chicago.
H. D. DEAM, Chicago.
H. R. WILSON, Chicago.
AUSTIN MOODY, Chicago.
JAMES DOUGLAS, Milwaukee.
W. J. EDBROOKE, Chicago.
HENRY SIERKS, Chicago.
ISAAC S. TAYLOR, St. Louis.
C. F. STRUCK, Minneapolis.
JOHN ADDISON, Chicago.
G. A. C. SMITH, Chicago.
S. S. BEMAN, Chicago.
ALFRED C. CLASS, Milwaukee.
MARTIN ROCHE, Chicago.
O. JOHNSON, Chicago.
FREDERICK BAUMAN, Chicago.
B. W. S. CLARK, Chicago.
W. W. BOYINGTON, Chicago.
D. M. HARTEAU, Green Bay, Wis.
GEO. H. EDBROOKE, Chicago.
W. H. DRAKE, Chicago.
HENRY REHWOLDT, Chicago.
ED. BAUMAN, Chicago.
E. S. JENNISON, Chicago.
JAMES R. WILLETT, Chicago.
F. B. TOWNSEND, Chicago.
CHAS. J. FURST, Chicago.
CHAS. RUDOLPH, Chicago.
ROBERT RAE, Chicago.
GEO. S. SPOHR, Chicago.
W. L. CARROLL, Chicago.

HONORARY MEMBERS.

R. C. MCLEAN, Chicago.
LOUIS MULLER, JR., Chicago.

The Chairman: Nominations for the committee on by-laws are in order.

COMMITTEE ON BY-LAWS.

Mr. C. K. Ramsey, St. Louis: I move that the chairman appoint a committee of five to draft a constitution and by-laws.

Mr. Henry L. Gay, Chicago, seconded the motion, which was carried unanimously.

(A discussion here followed in regard to the time when the report should be received by the convention, and it was decided to call for the report the following morning.)

The Chairman: I will appoint Mr. C. K. Ramsey, of St. Louis, chairman of the committee; Mr. J. W. Root, Chicago, Mr. W. L. B. Jenney, of Chicago, and I would like to appoint some gentlemen who have been in the American Institute of Architects.

Mr. Jenney: I shall not be able to serve tonight. I have engagements that will take me till eleven o'clock.

The Chairman: The chair will excuse you. It is necessary to have some gentleman who can serve to-night.

Mr. Starbuck: Do I understand that this Committee on By-laws are to formulate by-laws to be adopted by this convention?

The Chairman: It is a committee to formulate by-laws, instead of having it done in the convention. Then it can be gone over clause by clause, or if it seems fit, the convention can adopt the report as a whole.

Discussion here followed upon the propriety of formulating by-laws before the association was fully formed, after which the chair announced the Committee on By-laws as follows:

C. K. Ramsey, St. Louis, Chairman, W. L. B. Jenney, Chicago,
I. Hodgson, Minneapolis, Henry Ives Cobb, Chicago,
George Wirth, St. Paul.

Mr. McLean: I move we adjourn till ten o'clock tomorrow morning.

Mr. Randolph: May I ask a question? I want the convention to understand whether we have decided that we are to form an association or not.

The Chairman: I will say the chairman has attempted to appoint a representative committee, knowing something of their sentiments in regard to those things. I have tried to appoint a representative committee, which will relieve this body of this long discussion. I dare say, if the discussion is brought upon this floor, it will last a week, and then cannot possibly come to an end. All the points of these by-laws would be interminable, and it seems to me the best method is simply to go on with your committee.

Mr. Ramsey: I request the Committee on By-laws to meet directly after this meeting.

The convention then adjourned till ten o'clock Thursday morning.

SECOND DAY.

THURSDAY, November 13, 1884.

The convention re-assembled, pursuant to adjournment, at ten o'clock A.M., Mr. Burnham in the chair.

The minutes of the previous session were read and approved.

CONSTITUTION AND BY-LAWS.

Mr. Henry Ives Cobb, Chicago: Before the committee report, I should like to offer a suggestion, that some member move that our chairman, Mr. Ramsey, be allowed to read through the entire report to the convention before any discussion should be permissible. After that, let the secretary read it article by article, and then discuss it; but until the whole report is laid before the house, no discussion should be permissible.

Mr. Root: I move that the chairman of the Committee on Constitution and By-laws be requested to read the report, and that the committee be discharged, before any discussion of the constitution and by-laws be permitted.

The motion was carried unanimously.

Mr. Ramsey, chairman of the Committee on Constitution and By-laws, then read the report of the committee.

Mr. Clay moved that the report be received, and that the committee be discharged with thanks.

Mr. Sullivan seconded the motion, which was carried unanimously.

Mr. Root's motion was then put and carried.

Mr. W. H. Kirchner, of St. Louis, Mo.: I move that the Constitution and By-laws be read again by the secretary, before they are read seriatim. My object is to familiarize the convention with them.

Mr. Clay seconded the motion.

Mr. Ramsey: I would suggest that perhaps Mr. Kirchner would accept Mr. Cobb instead of the secretary, as he is more familiar with the matter.

Mr. Kirchner accepted the amendment.

The motion as amended was agreed to.

Mr. Cobb again read the report as a whole.

Mr. Clay: I move that we proceed with the discussion of this proposed constitution and by-laws seriatim.

The motion was agreed to.

Mr. Ramsey proceeded to read the articles separately, as follows:

CONSTITUTION.

"*Article I.* The name of this organization shall be The Western Association of Architects."

The Chairman: Gentlemen, in each case, as an article comes up, if it is the sense of the meeting it shall be considered as before the house, without a formal motion, ready for amendments or for adoption.

Mr. Kirchner moved the adoption of Article I.

Mr. W. S. Matthews, Nashville, Tenn. seconded the motion.

The Chairman: The chair would suggest that if a motion is made on the adoption of each article as it comes up, it is going to consume a great deal of time. I suggest that there be no formal motion, but as each article is read it be considered as moved and seconded, and before the house for action. It will then be simply necessary to put the question.

Mr. S. V. Shipman, Chicago: I suggest that there be a little addition made to that article, and that the organization be called "The Western Association of Architects of the United States of America."

Mr. Jenney: That is too long.

Mr. Shipman: I make it simply as a suggestion.

The Chairman: You will have to make it in the form of an amendment, if it is to be acted upon.

Mr. Shipman: If it is necessary, I make that motion. I thought the committee could act upon it, and add it to their report, without any motion.

The Chairman: The committee is discharged. There is no further duty to be performed by the committee. The matter is before the house.

Mr. Shipman: Then I make a motion that that be added to the name.

The Chairman: Please put your motion in writing. I request every gentleman who makes amendments here today, to pass them up to the secretary in written form, and that those who have amendments to make will get ready beforehand, so that we shall not have to wait.

Mr. Cobb: I think brevity is pleasant, especially in a name that has to be used a good deal. An article subsequent to that, distinctly sets forth that only residents of the United States are admissible for fellowship, and I think that covers the ground.

Mr. Jenney: I agree with Mr. Cobb. It is a matter of universal regret always, whenever an association has adopted a long name, that they have not made it shorter. It is discovered afterwards to be cumbersome. An effort was made to make this name as concise and as short as possible.

The amendment was lost.

Mr. C. H. Lee, Des Moines, Iowa: I move that we substitute the word, "Central" in the name, for the word "Western."

Mr. Cobb: Is not the word "Western" broader than the word "Central"? If you make it "Central," you make it to include presumably only the architects living in the United States. If you make it "Western," you include certainly all those that live west of the Alleghanies. I think particularly, we want to draw in all the members farther west than this. It seems to me that "Western" would be much broader than "Central," and the broader we can get it the better.

Mr. Lee: The word "Western," it seems to me, is confined to the Western States of America. We know our country is divided into three distinct parts, by nature and by general consent. We have Eastern, Central and Western. That was the idea I had in offering the amendment, that we are in the central portion. The word "Western" conveys the western limits of the country, which is beyond the Missouri river, and perhaps beyond the mountains. The word "Central" is more general, and will include if necesssary, both wings of the country, eastern as well as western, with us.

Mr. Sullivan: I would like to inquire if there is not already an association of that name in the country, the Central Association of Architects?

Mr. Cochrane: I was just going to enquire if the California Association is not called the Western Association? I rather incline to think it is.

Mr. McLean: I have not the name of that association before me, but as I remember, it is the California Association of Architects.

Mr. Patton: The time of the meridian west of here is the "central time," so called.

The amendment of Mr. Lee was then put, and lost.

Mr. Cochrane called for a division of the house,

On a rising vote, the amendment was declared lost, and the original article was adopted.

"*Article II.* The objects of the association are to unite in fellowship the architects of the United States, to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession, and to cultivate and encourage the study of kindred arts."

Mr. Kirchner moved the adoption of the article.

Mr. W. E. Elliott of Elgin, seconded the motion, which was carried without debate.

"*Article III.* This association shall consist of fellows and honorary members."

Mr. Sullivan: I move the substitution of the word "associates" for "fellows." Is this is to be an association, it is composed of associates.

Mr. Moulton seconded the amendment.

Mr. Cobb: In drawing up the constitution our idea was that there should be state associations, and this general association, that the members of the state associations should be known as members, and the members of the general association should be known as "fellows." That is why we had these two distinct names.

Mr. Taylor: I might suggest that we use the words "active members" in place of that.

The Chairman: That is the same thing.

The amendment of Mr. Clay, not being seconded, was lost, and the original article was then put and adopted.

"*Article IV.* Any architect practicing his profession in the United States may become a fellow of this association. All members in good standing in any state association organized under the laws of that state, also all members of the American Institute of Architects who shall become subject to the constitution of the Western Association, are by virtue of such membership fellows of this association."

A member asked: If a person is practicing architectural work and also contracting, is he to be considered in it, or are we to have a purely architectural organization? A good many men claim to be architects, and at the same time are nothing but contractors and builders. They furnish designs, but do not carry on a purely architectural business.

The article as reported was adopted without debate.

"*Article V.* The officers of this association shall be a president, a secretary, a treasurer, and as many vice-presidents as there shall be state associations, the president of each state association being a vice-president of this association."

The article was unanimously adopted.

"*Article VI.* It shall be the duty of the president to preside at all meetings of the association, but in his absence the vice-president of the association of the state in which the meeting of this association shall be held shall preside. It shall be the duty of the secretary to take the minutes of the meetings, and conduct the correspondence of the association, subject to the board of directors. It shall be the duty of the treasurer to collect all funds and disburse the same on the order of the secretary, when countersigned by the chairman of the board of directors."

The article was unanimously adopted.

"*Article VII.* This constitution may be amended by a two-thirds vote of the fellows present at any regular meeting."

Adopted without discussion.

BY-LAWS.

"*Article I.* The annual meetings of this association shall be held upon the third Wednesday in November, and at such place as shall be designated by a majority vote of members present at the previous meeting."

Adopted without discussion.

"*Article II.* The meetings of this association shall be conducted in accordance with 'Cushing's Manual.'"

Mr. Sullivan: I move the adoption of "Roberts' Manual" in place of Cushing's. I believe it is more simple and less complicated.

Mr. Moulton seconded the amendment.

Mr. Cobb: I suggest that Cushing's is a higher authority than Roberts'. Cushing is a generally acknowledged authority in this country, and it is better that we should adopt the highest authority.

Mr. Hodgson: Your committee investigated that matter last night pretty thoroughly. We looked into all the manuals, and thought from what we learned in regard to them that Cushing's was really the standard. I do not know which is the best. That is for this convention to say.

Mr. Jenney: Roberts stands very high, indeed. He is a man of eminent ability, and I should have suggested "Roberts' Rules of Order" when that article was drawn, only I could not recollect the name.

Mr. Sullivan: "Roberts' Rules of Order" have been specially designed for the use of small meetings and small societies, and Cushing's is for congressional bodies.

Mr. Hodgson: This is a large society. That is what we are aiming at.

The article as amended was carried, and "Roberts' Rules of Order" was adopted.

"*Article III.* The board of directors shall consist of five fellows, who shall have the care of the property and management of the general welfare of this association, and shall report at each regular meeting."

Mr. Clay: I ask for information; does that state how this board of directors are to be made? How are we going to get at that?

Mr. Ramsey: That comes afterwards. The next article provides for that.

Mr. Cobb: There is a general clause on elections.

The article as reported was adopted.

"*Article IV.* With the exception of the vice-presidents, all officers, including directors, shall be elected annually by a majority ballot vote at an annual meeting of this association."

The article as reported was adopted.

"*Article V.* All papers, books and other records shall at all times be open to the inspection of the fellows of this association."

Adopted without discussion.

"*Article VI.* Candidates for membership as fellows of this association shall pay an initiation fee of five dollars, except such as are members of state associations, or of the American Institute of Architects, who shall be admitted free."

Mr. J. W. Ackerman, Chicago: I move to amend by striking out the words "be admitted free," and that the following be substituted: "by virtue of such membership shall be members of this association."

Mr. Cobb: I would suggest simply "may be," instead of "shall be."

Mr. Ackerman accepted the amendment of Mr. Cobb.

Mr. Cochrane: It seems to me that that does not express the idea that they are admitted free. To inspire states to form associations, their members are admitted free into this association. While Mr. Ackerman's amendment sounds well, it does not express it.

The article as amended was read by Mr. Ramsey.

Mr. Cochrane: Now, that does not express the idea of admitting those members free. I prefer the original article. The idea is just this: if you belong to these associations, you do not have to pay to join this.

Mr. Ackerman: I think my original word "shall be" covered it.

Mr. Cobb called for the reading of the article as amended, and it was again read by Mr. Ramsey. It was also read as originally reported.

The amendment was put and lost.

Mr. Lee, moved to amend by omitting the words "except such as."

The chairman ruled the amendment out of order.

Mr. Randolph: I do not understand that the original question has been carried at all. We simply voted down an amendment. If the gentleman wishes to offer another amendment, I see nothing to prevent him doing so.

The Chairman: Let the gentleman read his amendment.

Mr. Lee: After the words "shall pay an initiation fee of five dollars,', insert "excepting members of state associations or of the American Institute of Architects, who shall be admitted free."

The amendment proposed by Mr. Lee was carried.

Mr. Cochrane: I would like to ask that committee for what reason there is any initiation fee at all. What is to be done with the money?

Mr. Ramsey: I will explain that. The idea was not that we would be able to collect very many initiation fees, because most of the architects are either now, or will become, members of state associations or members of the American Institute of Architects, through their chapters, and consequently would come into this Western Association free. It would only be a few members who happened to be in states where there was no state organization or no American Institute organization, who would have to pay an initiation fee; and the fact that they did have to pay it in order to come in would stimulate them to go on and organize state associations. In other words, it makes it easier for them to come into this association through a state organization. If they come in through a state organization, they are voted upon by their own state organization, and this association then accepts them without any further debate or voting. It makes it much easier for them to come in in that way, and the number of initiation fees that we would have to collect would be very small, anyhow. This association will have to rely for its revenue almost entirely on its annual dues.

Mr. Treat: As a matter of information, this being a question of dollars and cents, I would like to get an idea of the number of members who are already members of the American Institute, or of some state organization. If they are all members of other organizations, it cuts down the revenue considerably. I would like to get a vote, by raising of hands.

The vote being taken, the chairman counted thirteen present who belonged to other organizations.

Mr. McLean: I noticed that some Des Moines gentlemen did not rise who belong to the Des Moines Association.

The Chairman: If it is simply a town organization, that is not included in this article. It says distinctly, "state associations."

Mr. Cobb: Let me explain what the idea was in putting in an initiation fee. We discussed whether there should be any at all, and decided that if there were no initiation fee it would bar out the state associations to some extent. I think, in order to make this association successful, we have to foster the state associations. It would be necessary for a state association to have some initiation fee presumably; but if a man could enter this association without any initiation fee, there might be some who would do that, and slight their state association, and so place that state under a disadvantage. It seemed to us better to put in an initiation fee, which would probably be equal to the state association fee.

The Chairman: The idea of the committee, as I understand it, in this thing, is not to antagonize any other body, but to foster and retain friendship with them all.

Mr. Sidney J. Osgood, Grand Rapids, Mich.: I cannot see why those who come into this association, and have the benefits of it, should not pay the same as the rest of them. If we get any more members in here we should all come in alike.

The Chairman: This association is to supply a want that the associations in other places would not fill.

Mr. G. S. Spohr, Chicago: Do I understand that the charter members will have to pay an initiation fee?

Mr. Hodgson: That was not the object of the committee. It was discussed, and we thought that two dollars *per capita* annual dues would be sufficient to meet expenses. Then, again, we considered that it would not be exactly the thing to enter into competition with the American Institute or the state associations, so we put our initiation fee to this association in the way it stands. I am of the opinion that an initiation fee of five dollars is reasonable. I think the American Institute initiation fee is five dollars. We thought it would be well to place it at that, and all those who come into this association will have to pay that, or else come in through a state association, which would be perhaps the most convenient way.

Mr. Jenney: It is proposed to offer a resolution, after this constitution and by-laws are passed, declaring that all members who are registered — that is, present members — shall be considered as charter members, and that the initiation fee of five dollars be waived. It is confined to those who do not encourage state associations, and do not belong to them, who may come in hereafter.

The Article as amended by Mr. Lee was then put and adopted.

"*Article VII.* All fellows of this association shall pay an annual due of two dollars."

Mr. Sullivan: I rise to a question of information. I would like to ask this committee what they assume the expenses to be, that are to be met by this annual due of two dollars?

Mr. Hodgson: The expenses would be the secretary's salary, whatever that might be, stationery, postage stamps, and the like. I know of nothing else; no library, nor rent of room. It was supposed that some gentleman would accept the position, and attend to the business in his own establishment without charging rent.

Mr. Sullivan: Was it the sense of this committee that when this convention meets annually, the matter of entertainment be left to take care of itself?

Mr. Hodgson: It was the idea that the several states, or the fellows of this association, would willingly and gladly have the meetings at their own cities, in their own states. Indeed, a number of invitations were talked about last night. A great many gentlemen are anxious to have the meeting held at their city. I will say for Minneapolis, they would be glad to have you there; St. Paul would be glad to have you there; St. Louis and Cincinnati would be glad to have you there. No trouble about that. They will be glad to see us wherever we are willing to go.

Mr. Cochrane: I would like to ask if there is any provision in the by-laws for the payment of the secretary?

Mr. Hodgson: No, sir.

Mr. Cochrane: If not, I think there should be, and state the price.

Mr. Ramsey: I will state for the information of the gentleman that that question was left entirely with the board of directors. The secretary is to perform his duties subject to the board of directors, and the board of directors have entire charge of the distribution of the funds of the association. Therefore they can pay the secretary or not, just as they please. That leaves it with them entirely, to decide a thing which comes in immediate contact with them, better than this association at large can do.

Article VII was then unanimously adopted as reported.

"*Article VIII.* All applicants for membership as fellows of this association shall be referred to the board of directors, who shall investigate their standing, and if found worthy recommend them for election at the next meeting."

Adopted as reported.

Mr. Jenney offered the following resolution:

"*Resolved*, That all official communications from the officers, and all papers read at the meetings of this association, be intrusted to The Inland Architect and Builder for publication, and that all such publications shall be considered as official."

Mr. Jenney: This assumes that the Editors of The Inland Architect are willing to accept the position of an official organ of this association, which I have no doubt of from the energy, zeal and kindness they have shown us from the very beginning.

The Chairman: Do you offer that as an addition to the by-laws?

Mr. Jenney: Oh, by no means.

The Chairman: Simply as the sense of the meeting?

Mr. Ramsey: I would like to offer one more addition to the by-laws. I have just been in conference with Mr. Cobb about it. We omitted to make any provision by which the by-laws could be amended. I would like to add this:

"The by-laws of this association can be amended at any meeting by a vote of two-thirds of the fellows present."

The Chairman: Is there any second to Mr. Jenney's motion?

Mr. Randolph: Mr. Jenney's motion I take to be out of order, while we have another matter under consideration.

Mr. Jenney: I would like to defer my motion until it comes in order.

The Chairman: It was the decision of the chair that the constitution and by-laws were disposed of. I asked if there were any further resolutions in regard to that matter, and received no answer. Mr. Jenney then proposed his resolution.

Mr. Cobb: Do we not have to pass as a whole on the constitution and by-laws?

The Chairman: As each article has been passed upon by itself, it does not seem to me to be required.

Mr. Hodgson: If I am in order, I wish to correct Mr. Ramsey, and say that the committee did not forget anything, but as Mr. Cobb said, there were some things to be added that were left to the convention. Therefore we did not add the clause that is now proposed to be added.

Mr. Randolph: I move that the constitution and by-laws be read as a whole.

Mr. Clay seconded the motion.

Mr. Ramsay: Before that is put, I wish to offer my resolution as Article IX of the by-laws of this association.

Mr. Moulton: I move its adoption.

Mr. Clay seconded the motion.

Mr. Cochrane: I would like to suggest that any amendment proposed should be circulated among the members two months before the meeting, so that each one could consider and discuss it in his own mind, so as to be prepared to vote when he comes to the meeting. That has been the custom with the American Institute.

Mr. Hodgson: We talked that matter all over, and we came to the conclusion that it would be very hard to reach the members, and it would be fair and proper to leave it simply to a two-thirds vote of the members present at any regular meeting. Of course, it is with the convention; they can do as they please with regard to that. A clause of that kind would not be injurious by any means.

Article IX, as proposed by Mr. Ramsay, was adopted.

Mr. Cobb: There was another question that was brought up, which we decided not to settle, and that was the question of a quorum; whether any article should be put into the by-laws regulating what should constitute a quorum of this association. I would like to have some expression with regard to that point.

Mr. Hodgson: It seems to me that the fellows of this association, when they become fellows, ought to take interest enough in the association to attend the general meetings, and that two-thirds of them should be sufficient to change anything or do any business. If there should be only three present, they should be allowed to attend to the business of the entire association, and all ought to submit to it. All men should do their duty, and if they don't do it, the few men who come here should have power to do it, and the rest should stand by it.

Mr. Jenney: I move that a majority of those present shall constitute a quorum.

Mr. Hodgson seconded the motion.

The Chairman: The gentleman will have to examine and see whether he is not making a motion that will conflict with "Roberts' Manual."

Mr. Randolph: I move the adoption of the constitution and by-laws as a whole, and call for the reading of the constitution and by-laws as amended.

Mr. Moulton seconded the motion.

The question being on the adoption of the constitution and by-laws as amended, it was put and carried.

Mr. Jenney renewed his motion "that all official communications from the officers, and all papers read at the meetings of this association, be intrusted to THE INLAND ARCHITECT AND BUILDER for publication, and that all such publications shall be considered as official."

Mr. Kirchner seconded the motion, which was carried unanimously.

Mr. Osgood: I move that THE INLAND ARCHITECT AND BUILDER be made the official organ of this body, and that its publishers be made honorary members of this association.

The Chairman: The first part of that is incorporated in the resolution just passed.

Mr. Osgood: I move that the publishers of THE INLAND ARCHITECT AND BUILDER be made honorary members of this association.

Mr. Jenney seconded the motion.

Mr. Cobb: I would offer as an amendment that the Editors of THE INLAND ARCHITECT be made honorary members.

Mr. Osgood accepted the amendment.

The motion as amended was carried unanimously.

Mr. Jenney offered the following resolution:—

"*Resolved*, That all members of this association who may become such before the annual meeting of 1885, shall be declared charter members, from whom no initiation fee will be required.

Mr. Cobb seconded the motion.

The Chairman: If that modifies the constitution or by-laws, the gentlemen have got to reconsider it. It will take a two-thirds vote to change it.

Mr. Sullivan: I move as an amendment, that the words "close of this convention" be substituted for the words "annual meeting of 1885," because by our constitution no other members can be elected until the next annual meeting.

Mr. Jenney: I have no objection to that.

Mr. Cochrane: I would like to ask Mr. Jenney if he means those that have registered, and are on the roll?

Mr. Jenney: I tried to cover that by putting in all that shall be members before the next annual meeting; that is, before new members can be elected. It now reads, all that have registered and become members during this convention.

Mr. Sullivan: I would ask for information, who are members of this association? Is it those who have signed the roll, or those who have been passed upon by the Committee on Credentials?

The Chairman: As I understand it now, the gentlemen who form the membership of our body are those whose names were reported by the Committee on Credentials, and accepted and formally declared as constituting the body, with a few additional names that were afterwards sent in by the same committee. We have now the roll as they passed it. The resolution also stated that subsequent names that the committee should present at this meeting would be accepted, without their being read before this body.

Mr. Clay: This resolution of Mr. Jenney's opens up a question that we cannot very well consider immediately. There are a great many architects throughout the states who have signified their desire to join this association, but who were unwilling to be here at this meeting, and of course Mr. Jenney desires to give them at least one year to come in, and to become charter members. It seems to me that it would be better for us to defer the consideration of this motion, either by appointing a committee to give us a proper resolution with regard to it, that will cover all points, or to defer it until we have thought more thoroughly in regard to it, so as to be careful and hurt no one's feelings. I know several architects in this city who desire to come into this association, but who have been unable to come to this meeting, and whose names have not been presented by the Committee on Credentials. It seems to me it is better to defer this matter until either the next meeting or until we can more thoroughly consider in all its bearings who shall form the present association. After that, of course, we have provided that the board of directors shall elect.

Mr. Hodgson: It appears to me that Mr. Jenney could cover the whole field by including all those who have signified their intention of being here, but could not come.

The resolution as originally offered by Mr. Jenney was read.

Mr. McLean: The length of time may be a question, but there is no question but that there should be a chance for these parties to come in as charter members. There are upwards of one hundred men who have written to THE INLAND ARCHITECT from all parts of the country indorsing this movement, saying that they could not come, and a great many saying they would endeavor to come who have not come; these men, I should say, ought to come in as charter members.

Mr. Cobb: I think we want to do everything we can to foster the original membership, and it seems to me Mr. Jenney's motion would have a tendency to increase the membership immediately. It is necessary to have some time to communicate with these men, who are just as anxious for the success of this association, and just as much interested in it, as we are. I should think the first of January would be a very good time to set. I second Mr. Jenney's motion as originally put.

The original resolution was again read.

Mr. Patton: After this convention adjourns, can any one be admitted to the association until the next annual meeting? Or can the board of directors between now and next meeting admit members?

Mr. Jenney: Is not the Committee on Credentials still in session?

The Chairman: Yes, sir, and it was empowered by resolution, as long as this convention is in session, to report further names, if in their judgment they see fit, without submitting them to the direct action of this house.

Mr. Sullivan: The motion is not clear to me. The constitution provides that the board of directors are to report candidates for election, but they are not elected; the board has no elective power, but temporarily the Committee on Credentials has elective power.

The Chairman: Until the board of directors is formed. There is no doubt about that.

Mr. Sullivan: Then between the close of this convention and the next meeting, there is no opportunity for election. Everybody that joins this association must do so before the close of this convention.

The Chairman: You are right. I presume it was the sense of the mover of the original resolution that the matter should be held open during the sitting of this convention.

Mr. Sullivan: That is why I wished to amend Mr. Jenney's resolution, making it terminate with this convention.

Mr. F. S. Allen, Streator, Ill.: I move to amend the original resolution by inserting the words "or at" in place of the words "on or before," the annual meeting of 1885. That will give an opportunity for persons who wish to join the association to come in at the meeting of 1885.

Mr. Jenney: I accept that amendment. My only object was to induce them to come in at an early date.

The resolution as amended by Mr. Allen was read as follows:

"*Resolved*, That all members of this association who may become such before or at the meeting of 1885 shall be declared charter members, from whom no initiation fee will be required."

The motion as amended was put and carried.

Mr. Ramsey read the constitution and by-laws as amended.

The Chairman: Mr. Cobb has suggested that the question of a quorum must be definitely settled. "Roberts' Manual," which has been adopted as our official guide, says, "A quorum of an assembly is such a number as is competent to transact its business, without there is a special rule on the subject of a quorum."

Mr. Ramsey: Of course this will have to be an amendment to the by-laws. Our by-laws provided that they can be amended at any meeting by a two-thirds vote. We have a quorum here, and can amend our by-laws now. I will offer a resolution, that another by-law be added, stating that twenty-five fellows shall constitute a quorum of this association.

Mr. Starbuck seconded the motion, which was carried unanimously.

Mr. Cochrane offered the following resolution, which was seconded by Mr. Hodgson, and carried:

"*Resolved*, That the headquarters of this association be at the office of The Inland Architect and Builder until otherwise ordered by the board of directors."

Mr. Patton: I move that a committee of five be appointed by the chairman, to report to the association at the meeting tomorrow morning a resolution on the subject of professional fees and competitions.

Mr. Spohr seconded the motion, which was carried.

Mr. Randolph: I move that we proceed to the election of the officers for the ensuing year.

Mr. Hodgson seconded the motion.

Mr. McLean: That is rather a long affair. Would we not feel better on Friday morning to do that business? The architects have had no chance as yet to see Chicago. They have been attending strictly to business. I know some of them were last evening, and they should have an opportunity this afternoon of seeing the city. If we proceed to elect officers we will stay here all this afternoon.

Mr. Jenney moved that the convention adjourn till eleven o'clock Friday morning, which was seconded by Mr. Hodgson, and carried.

The following committee was appointed to report on professional practice, fees and competitions: John W. Root, J. C. Cochrane, Chas. H. Lee, E. O. Fallis, Chas. K. Ramsey.

The convention then adjourned till Friday at eleven o'clock A.M.

THIRD DAY.

Friday, November 14, 1884.

The convention met pursuant to adjournment, Mr. Burnham in the chair.

The minutes of the previous session were read and approved.

Mr. J. W. Root, Chicago, presented the following report from the Committee on Professional Practice, Fees and Competitions:

PRACTICE.

1. *Resolved*, That in his relations to clients and contractors, the architect should be an impartial arbitrator; and that under no circumstances should he act as a special pleader for either party.

2. *Resolved*, That the relations between architects and clients should be confidential; and that no architect is worthy of employment who is unworthy of trust.

3. *Resolved*, That it is the sense of this association that the architect should in all cases superintend the work designed by him.

4. *Resolved*, That, in cases where for special reasons the architect does not superintend the work designed by him, his responsibility ceases with the delivery and acceptance of the plans, unless by expert testimony it can be proved that the plans were defective.

5. *Resolved*, That the president, secretary and treasurer of this association constitute a board of arbitration, whose duty it shall be to adjust all questions in dispute between members of this association and their clients, which shall be submitted to this board.

FEES.

Recognizing the desirability of uniformity throughout the country in the matter of fees, and having implicit confidence in the action of the American Institute of Architects, in this respect

Resolved, That this association adopt the schedule of fees recently adopted by the American Institute of Architects; and that the secretary of this association mail to each member a printed copy of this schedule as soon as practicable.

COMPETITIONS.

Resolved, That no architect should enter a competition for any building or other work, unless the decision of the competition shall be made by recognized experts.

Mr. Adler moved that the report be adopted.

Mr. Hodgson seconded the motion.

Mr. Clay: I would inquire whether, if these resolutions are adopted, they are supposed to be binding upon each and every member of this association?

Mr. Sullivan: As I understand it, these resolutions express the sense of this association, but they are not binding.

Mr. Root: It was intended by the members of this committee that the resolutions should be all so worded that they should avoid being obligatory in the strictest sense of the term, but should express the general sense of the association as such, to be conformed to if practicable. The committee deemed it to be true that no series of resolutions, or no code of professional practice, could be under all circumstances adhered to; that there were in every architect's practice numberless cases where he might, for special reasons, have to modify them very much; but that these should constitute the sense of the association, and be a guide to every man in his practice.

Mr. Burnham vacated the chair, which was taken by Mr. Adler.

Mr. Burnham: Gentlemen, I have a word to say in regard to the matter of competitions. I think we ought to have among us a clear and distinct understanding of what the trouble is, and what the trouble has been, which has invariably caused so much expense year after year, and pretty much all our heartburnings. It seems to me that it lies in the competition, and it nearly all has sprung from one source; that a man's work is taken, and incorporated into a building before his eyes, and he is not even recognized in the matter, and gets no thanks, far less receives any compensation. I would like to see a resolution drawn, or a clause incorporated in the previous resolution, which should state briefly and very concisely, in a general way, that whoever of us in this body shall, in future, go into competitions, where the competition is made up simply of ourselves and of no outsiders, that we will agree to ask a written contract from the board, or committee, or the individual who stands in lieu of the owner, that our plans shall be returned at the end of the competition, and that nothing shall be taken from any one of the plans where it differs from the others without the consent of the designer, and a proper compensation. If this is done, it will prevent a committee calling on a number of gentlemen and taking their plans, and then calling on somebody else, if they happen to see fit, to take them and make up something from them, which is the usual course. Nine times out of ten, or ninety-nine times out of a hundred, that has been done; every man feels it. He loses his time, his money and his temper, and the evil has engendered among us pretty much all the hard feeling that we have had. If we can only cover that one point, that the owner must make an agreement in writing, before he receives a plan, that every set of plans shall be returned to the competitor or competitors that he has rejected, and that he binds himself to take nothing and use nothing, down to the smallest detail, which seems to be, as far as those engaged in the competition are concerned, the original design of that particular man, if that is done, and we will hold to it, it will insure fair competitions, and will make it impossible for an owner to take the plan of one man, leave him entirely out of the thing, and then let some other man execute it. It will make it impossible for the owner to take three or four of the finest ideas from various plans, to make a heterogeneous mass, which he calls a design, out of it. I think that ought to be agreed to by us all. I would like some gentleman to put that in a clear way, and offer it to the convention as an amendment.

Mr. Sullivan: I think that this association is very much in the condition of a green wall; it has to be handled very tenderly. I think the resolutions of that committee are very admirably expressed, but it is rather early for us to bind ourselves to anything. Let us adopt the resolutions of that committee first, and try them for a year, and see how they will work, each man working on his own responsibility. If at the end of a year this organization has attained sufficient solidity to warrant the adoption of a somewhat firmer set of resolutions, that would be the time to find out whether it was politic to do so.

Mr. Lee: This matter came up in the committee, and we came to the conclusion that if the gentlemen of this profession will live up to the suggestion offered in that resolution, that they will not enter into a competition unless the decision is made by recognized experts, this matter, which our worthy chairman has mentioned, cannot possibly enter into the case. If the decision is made by recognized experts, then the committee is left out. That is a very broad resolution, and if we will live up to that, our difficulties will in a measure, in fact, nearly all vanish, because it is from the decision of the owner, or of a committee who are not experts, that this after trouble grows. I think that any of us would be willing to submit to a jury of three or five competent architects, whom we recognize as experts, when they have made their decision in that competition, and that will end the matter; our plans will be returned to us, and we can go home. They have nothing to use in that case.

Mr. Hodgson: The remarks of the gentleman who has just taken his seat are very good, but it is sometimes very inconvenient to get experts. They refuse to employ them. They generally desire to be paid; in fact, they ought to be paid; their services are worth a great deal to them. I am of the opinion that if that part of the resolution could be substituted by something put in the form as intimated by our worthy chairman, it would be very much better and plainer. It is a very difficult matter, in the case of a dwelling house, where you are not dealing with boards but individuals. They will not go to the expense; they simply say they will manage their own business. If we had that resolution, that if they take anything of ours they must pay for it, it would be better. It is simply business fair play. Make it as plain as it can be to a man of common sense, and any business man will say that is fair. I find the public pulse beats well when they think you are going to do what is right.

Mr. Sullivan: Does the chair understand it to be the sense of this meeting that it desires to bind itself by the resolutions of that committee; to bind itself as a body?

The Chairman: It is not the opinion of the chair that anything is obligatory by any action here.

Mr. Ramsey: I do not know that it is best for a committeeman to talk too much about the resolutions the committee has adopted.

The Chairman: It seems to me perfectly proper. You have spent some time on this.

Mr. Ramsey: We spent some time to get these resolutions in shape, and it seems to us we got them pretty near right. The resolution has a broad base and a broad scope. It covers every case really, but still the objects of a convention of this kind, and of a resolution of this sort, should be to do the greatest amount of good to the greatest number. Now when it comes to the question of competition for a small dwelling house, or a store, or some minor matter of that kind, of course it probably would be impracticable to get the owners to employ expert architects, or expert men to decide the merits of the competition; but these competitions, whether decided rightly or wrongly, do not affect the general question very much. It is these larger competitions, competitions that assume a semi-national magnitude, that effect the profession at large. It is competitions for courthouses, statehouses, capitol buildings, exposition buildings, and all that sort of buildings, that affect the profession at large. Now these are buildings that involve large expenditures of money, wherein the committees can well afford to employ and pay liberally for expert services to decide the merits of any competition of that kind; and I am sure that wherever the parties deciding the competition are experts, the man who furnishes the greatest number of good ideas will undoubtedly be given the job, and

we will come very near getting exact justice. Of course, I do not think that we are in a condition at present to pass any resolution which will cover the ground of these small competitions absolutely. Every architect must be left a great deal of freedom anyhow to decide for himself, in special cases, how he shall act. This resolution only recommends what we think he ought to do. We do not say he shall absolutely conform to it. It is simply a resolution that it would probably be well to work up to, and live up to as near as possible.

Mr. Adler: It would appear to me any way, even with reference to the remarks of Mr. Hodgson, that the minor competitions, for dwelling houses and so on, could hardly be regulated by the action of this body. They are really of a minor importance, and it is almost impossible to form any definite code of procedure in the case of such competitions. I think the number of those who participate in them is comparatively small, and I believe is growing continually less, and the more difficult they are made, the harder they are made for the participants, I think the better it will be for the profession, and the sooner they will be weeded out. I think if we recognize the larger competitions, and legislate with reference to these only—that is, for the kind of work Mr. Ramsay has mentioned—we will do much better, and assert the dignity of this body to much better effect than if we seek to regulate all these trivial minor matters.

Mr. Hodgson: I have a very sad experience in the way of experts being employed by great boards selected by state authority, men who knew less, perhaps, about the plans they were examining than the board themselves, and who worked for them all the time to the injury of the competitors. Finding that they had done a great deal of harm, and acted badly, I must confess they tried to get out of it, but too late; the mischief was done, simply because I suppose the competitors had not the right to select the experts themselves, or one-half of them; they were selected by the other side. Now, how our resolutions read I do not know. I have forgotten whether it is provided in them that the competitors have the right to select one-half of the expert jury; but whether they are employed by individuals or by a board, who are constituted by very high authority, they will employ men who will do their work, aye, even their dirty work. I have known them to do it, and I can prove it. I have lost thousands of dollars by just such conduct as that. Now, if a clause could be inserted such as was expressed by our chairman, it would be well. Leave that as it is, if you please; but add something to it covering the little things, for many of them, I tell you, amount to a big thing. It does not bind anyone but the members, and with them it is a matter of honor. Our interests are at stake. If you can do that, I think something of that sort should be added.

Mr. Illsley: I think we are apt to lose time on this subject without reaching a satisfactry conclusion. Those who have read the English architectural journals know that the English architects are attempting to settle this by a sort of circular addressed to other architects. In listening to this discussion, I have thought one desirable stipulation has been overlooked; that is, that there should be such exhibition of all drawings submitted as would be open at least to all those that compete. I think that would tend to prevent the party to whom the work is given adopting ideas that he got from other persons. But there may be other details that will have to be worked out. Is it not practicable to have a permanent committee appointed here for this work, who shall prepare something on this subject and submit it to the architects and to all the members of this association for their criticism, so that the merits of the question can be put before us at the next meeting in a complete shape? I doubt our being able to to perfect it in such a meeting as this; and I rise to ask if it cannot be arranged in some such way as that, and we content ourselves with passing these resolutions as they have been presented?

Mr. J. J. Douglas, Milwaukee: I have listened with a good deal of interest to the discussion on this question, but it seems to me there is one point that has not been touched yet. The gentleman seems to be sensitive when the question comes up about what it will cost for experts, to the persons receiving the services of the gentlemen belonging to this association, or belonging to the profession. It seems to me that there should be some kind of compensation demanded by everybody who offers a plan in a competition. If our services are worth anything at all except to be squandered on wealthy men and wealthy institutions, giving our labor free, it seems to me the most humiliating position in which an architect ever was placed, for a lot of ignorant men to come up and demand that he shall make plans in a competition without any remuneration whatever, and without any chance of a fair decision. I think that this convention ought to demand that some kind of compensation, at least the office expenses, should be paid for every competition. I do not enter into competitions myself, but I think that the dignity of our profession demands that they should command some compensation. Why is it that we should furnish plans for nothing, and ideas for nothing? As you know painfully, they have been adopted by others, without any compensation whatever. You do not ask a builder to put up a building in competition; that is his labor, this is our labor; and we ought to demand compensation for it. But I do not rise to speak exactly to that point. The point I did rise to speak to is the matter of superintendence. Your worthy committee, in their excellent resolutions, have said that every architect should superintend his own work. That is an excellent idea, for none other can carry it out perfectly; but I do wish that that committee would explain the resolution sufficiently, that we would know where to stop with that superintending. I have been forty years in this business, on fine dwelling houses, and I declare I cannot tell the difference betwixt myself and the family physician or the minister.

The Chairman: The gentleman had better suggest a line, and where we can draw it. I think we would all like to know that.

Mr. Douglas: I do not pretend to assume that I will draw the line, but I would like to have this committee draw a line. It is painful. I have never been able, in all the impositions that have been put upon me, to say, "There, I have done all my duty." When sent for to go a hundred miles at my own expense and return, to show a mechanic how to put in blinds and pockets, and such little things as that, I could hardly refuse, for the man did not know how to do it, and I had to go and tell him. I wish that somebody would give his experience, and give some idea where we can stop with this matter of superintendence, for it has tormented my life out. (Laughter.)

The Chairman: I think that can be very readily met by a prudent man in making his contract. A prudent man can somewhat abate the perplexity, if only partially, by establishing a base line in his contract. That can all be determined upon exactly in each gentleman's case.

Mr. Ramsey: I should suggest that you collect your fee, and then stop. (Laughter.)

Mr. Patton: It seems to me that some of these smaller competitions are the most vexatious things that come up, and the proper thing that should be done with nine out of ten of them is to stop them altogether. You go to the chairman of a building committee, and ask him whether the committee have any plans handed in, and whether they have already adopted an architect. He says the building committee has been given no authority to do anything. It seems, nevertheless, that four or five architects have handed in plans. "Here they are," and so he brings them out. These are quite elaborate drawings by some of the leading architects of the city. "Now, he says, "we do not like this plan because of this feature, nor that because of that feature. If you can get up something better than that, go ahead." I would like to ask this convention what a young man should do under these circumstances, seeing he has the inside track, and these older heads have been a little premature? Should he hand in a plan; or should he stand back on his dignity and say: "I do not make sketches unless I am paid for them?"

Mr. Clay: What any young man might do, at least, is to be honorable enough to shut his eyes, and not look upon what other gentlemen have done. I tell you the great trouble is in ourselves, every one of us, and not in our clients. We are too anxious to grasp, and take and incorporate the ideas of others; and if every architect would refuse, when he was making a working drawing, to incorporate any idea of another, he would very soon stop this sort of thing. The trouble is right with us; we are not honest enough ourselves. It is not with the client altogether.

The Chairman: I think the chair can express the sense of us all by saying that he who has the competitive plans of others laid before him may under no circumstances afterwards put in a competitive plan himself. I do not think any honorable man can possibly hesitate to throw aside any chance that is offered him where he is asked to do so thoroughly unjust a thing as that. I have no doubt that is the sense of the meeting. (Applause.)

Mr. H. I. Cobb: Let us return to this last resolution, and see if we cannot get rid of it. I would offer as an amendment that we add after the words, "recognized experts," these words—"who shall be accepted by the competing architects."

The Chairman: That would cover all that I would want.

Mr. Hodgson: Or "acceptable to" them.

The Chairman: "Accepted" is better.

Mr. H. I. Cobb: I would move this further amendment:

"*Resolved*, That each member of this association, upon entering a competition, shall demand a written contract from the person or persons in charge of the competition, to this effect, that all plans not accepted shall be returned to the architect presenting them, and that no feature peculiar to such rejected plan shall be in any way incorporated into the structure of the work without written consent."

I want to say in regard to that, I do not think we should try to make strict rules for all competitions. I think we should simply express the general sentiment of this meeting and this association, and for unimportant business let the architect decide for himself. If the competition is important enough, so that it is liable to be brought before the attention of the whole association, I think it should be the sense of the association that this resolution should be followed.

Mr. Ramsey: I would like to add just one clause to that resolution, and I think the gentleman will accept it. That is this: "provided, that recognized experts shall be appointed previous to entering into the competition." There is a loophole that these fellows can crawl out of by refusing to appoint the experts until after all the drawings are made and handed in, and then go to work and appoint their experts. The architects may say, "I don't like these experts; I do not think they are competent." The gentleman conducting the competition will say, "Well, I propose to appoint them anyhow. If you do not like these gentlemen, all you have got to do is to take your plans away; but if you leave them here, you have got to accept these gentlemen as experts." But if the experts were appointed before the competition is entered into, then everybody entering into the competition could judge for himself whether he was satisfied with the experts or not. If he found that the experts, in his opinion, were unreliable or incompetent to judge of the merits of the competition, he could simply stay out.

Mr. H. I. Cobb: I accept that amendment.

Mr. Cochrane: Being a member of that committee, I suppose I ought to say something. The report of the committee expresses my feelings exactly as it is. This association, I think, should be very cautious not to make any mistakes. We are in our infancy yet, and this is a mere expression of the feeling or the opinion of the members. To go farther would defeat that last resolution, and I think would do great harm. I have had a large experience in competitions. Suppose, for instance, that a county proposes to build a courthouse. The board of supervisors advertise for plans. What can an architect say that they shall do? They have acted for themselves, and they will act for themselves; they will not act for this convention nor for this association, and the less we meddle with them the better. If we suggest that experts be employed, that is proper, but let it rest there. I suggest that we adopt the report just as it is.

Mr. Taylor seconded Mr. Cobb's amendment.

The resolution as amended was then read, as follows:

"*Resolved*, That no architect should enter into a competition for any building or other work unless the decision of the competition shall be made by recognized experts, who shall be appointed before competitive drawings are prepared, and who shall be accepted by the competing architects."

Resolved, That each member of this association, upon entering a competition, shall demand a written contract from the person or persons in charge of the competition, to this effect, that all plans not accepted shall be returned to the architect presenting them, and that no feature peculiar to such rejected plans shall be in any way incorporated into the structure of the work without written consent."

Mr. H. I. Cobb: We might strike out the words "acceptable to competing architects," because if the experts are appointed before the architects compete, a man can refuse to go into the competition, and if he comes in at all, then he accepts the experts. We do not then oblige a man to employ experts, but we do not go into the competition unless there are experts.

The Chairman: The point is well taken. This resolution, it seems to me, covers the entire ground, because it insures you absolute certainty of losing no idea that you have submitted, and that is the utmost that a man can expect. If the committee adopt something else, they do not adopt yours, but what we want to protect ourselves against is their thieving from us. This resolution protects us completely; under it, I would not care who were the experts. If they want a bad plan, let them take it; but if they want a good plan they cannot get it.

Mr. Cochrane: That meets my views exactly, so far as the principle is concerned; but the impossibility of executing that is so clear to my mind that I think we would be a laughingstock.

The Chairman: I would like to ask the gentleman why it is impossible?

Mr. Cochrane: I will explain. In the first instance, you could not get a board of commissioners to make a contract of that kind.

The Chairman: Would it not be possible for all the gentlemen who were asked to go into the competition to refuse, without that contract was made?

Mr. Cochrane: They will not refuse; and for that reason I say it is an impossibility. Mr. Clay hit the nail on the head when he said that any architect that would see plans and then make a competing plan is dishonest. I say the same thing. But we cannot keep dishonest men out, or cut off their work, by any such resolution. I like the resolution, if you could only make it successful, but I know it is an impossibility; and if that word "shall" remains in there, I should have to withdraw from this association.

Mr. H. I. Cobb: I think, if we are going to resolve at all in regard to competitions, that we want to do it amply and fully. Otherwise we want to drop the whole business, and let every man do as he thinks best.

Mr. Hodgson: I think it is our duty, in the absence of a statutory law, to protect ourselves by our own laws. We have a right to do it, to regulate our own affairs; and I cannot think there is any gentleman on this floor who would pledge himself to comply with and subscribe to the resolutions as presented by our committee, and then violate them. If there is such a man, the sooner he gets out, in my opinion, the better.

Mr. Illsley: I think Mr. Cochrane's views are entitled to a great deal of consideration, from his great experience in competition. There is another question that has occurred to me. How do you know, in a case of this kind, that the party who does the work has used any design, or any idea he has got from another design? And if you do not know it, how are you going to bring him to task for it? Supposing he does do it; nobody sees the plan; you do not see your neighbor's plan. You have your own design, and you find in this gentleman's accepted plan something you think he got from yours. How do you know he did not get it from some of your neighbors? Supposing you could prove he got it from some neighbor, or from yourself, then what will you do? It occurs to me the question is quite too large to be settled in this way; and if this resolution is not adopted, I would present a resolution asking for a permanent committee.

The Chairman: The chair would say, for the information of the gentleman, that the words are very explicit: "And that no feature peculiar to such rejected plan shall be in any way incorporated."

Mr. Cochrane: The "shall" that I had reference to there should be changed to "should."

The Chairman: Your objection is that it should read, "that each member upon entering into a competition *should* demand a written contract?"

Mr. Hodgson: Well, I do not think there would be anything very wrong about that.

Mr. Root: If I may be pardoned a moment, as chairman of the committee, I would say that the committee were actuated in large part by a desire to be extremely conservative in all the action we take at present, and that although the resolution offered by Mr. Cobb came before the committee in that form, it was not recommended by them, because it was thought, as Mr. Sullivan has suggested, that this association was something like a green wall, and that it would be well to do nothing that we might feel called upon to undo; that it would be better to lay a foundation, and do something that would express the sense of the convention, rather than to adopt such resolutions as might represent the divided sense of the convention, to be acted on only by us as individuals; that the association will have much greater force in the west if our action were that of a corporate body than of a body divided among themselves; and that we had better try the experiment of such things as were the universal sense of us all than try the experiment of those things in the passing of which there should be dissenting voices.

Mr. Sullivan: I agree very heartily with Mr. Root. I think what that committee has mapped out is all that should be tried for one year. In view of that fact, and in view of the amount of feeling that has been developed in discussing these resolutions, I move that the amendments be laid on the table.

The motion was put, and negatived. The amendments were then put, and were also rejected.

Mr. Ramsey moved: "That no architect should enter into a competition for any building or other work unless the decision of the competition shall be made by recognized experts, who shall be appointed before competitive drawings are prepared."

The resolution as thus amended was read.

Mr. Clay moved that after the words "recognized experts," the following be inserted: "whose names shall be made known when the competition is invited."

Mr. Ramsay seconded the amendment.

Mr. Cochrane: That is the same thing that I said could not be done. When the competition is invited—when will that be? When the first advertisement is put in the papers?

The Chairman. When the notice is sent to the parties, I suppose.

Mr. Cochrane: The notice is not sent to the parties. It is put into the newspapers. How can we make them appoint experts at all, before we know they are going to build?

The Chairman: This whole business is not mandatory by this body upon its members. It leaves them in freedom in cases such as you speak of. There are but very few of us who are constantly competing. It seems to me there never would be anything said if the gentleman should go into a competition on a newspaper advertisement, if he cared to do it.

Mr. Cochrane: Well, if I belong to an association, I want to abide by it, and I shall as long as I am a member. I think any gentleman that does not, is not worthy to be a member. But I want to have the resolutions, or the instructions that go out from this convention, as liberal as possible, and as business like as possible, so that it will not be a detriment to us to belong to this association. As is well known, my business comes largely from public buildings, and I do not want to be hurt by joining this association. I do not want to be cut off from a $10,000 job, but I want to abide by this association if I belong to it. To say that a board of commissioners shall appoint experts before they invite competition, they have got to do it before they advertise, and before we know anything about it; and if they don't, to be honorable we could not go into it.

Mr. Ellis, Marshalltown, Ia.: The resolution seems to me very proper indeed. We may not effect that in a short time; it will undoubtedly take time; good things go slow; but if we can do some good by it, the people will in time be educated up to the advantages of having experts. We can certainly give them better buildings if we get men competent to judge of their merits than if we have them passed upon by individuals in the country who know nothing about it. If we can establish that, and educate the people up to that point, they will soon learn the advantages of it. I have a great many competitions, like Mr. Cochrane. I do a large amount of church work, school work, opera house work, and the like, and I find a great deal of crookedness. If we can avoid this by slow degrees, we are certainly doing some good, and it can certainly do no harm. We have got to make a start, and I say, let us start on the right track if possible. I will agree with Mr. Cochrane that it is a very hard thing to do; we may not be able to do it in all cases, but we certainly can in some. I meet with many boards who are wise men, gentlemen and honest men, who do not do these things. You take honest men, and they are willing to submit to experts, and really can see the advantages of it. They will see that a plan is good because it is approved by recognized experts, and they want a good building. Now, if we can work to this point where they can see the advantages in it, it will be but a short time till all public competitions will be done in that way. I thought I would make this point because it is not all architects that enter into competitions. There are a great many young architects coming up, that have not been through the mill. If we can give them advice, which in the future will be of benefit to them, I think we ought to give it.

Mr. Jenney: In my opinion, the essence of this whole matter is the employment of experts, and as amended by Mr. Clay, I would approve of the resolution, except that I would add to it if possible that the experts should always be a majority of the committee, as is invariably the case in all competitions in France. We must have experts, and we must know them before we send in our designs.

Mr. Clay accepted Mr. Jenney's amendment, which was read as follows:

"After the words 'recognized experts,' add the words 'whose names shall be made known when the competition is invited, and who shall form a majority of the committee.'"

Mr. Illsley: Gentlemen, we already know that there is considerable difference of opinion among those who are here, whether this should be passed in this form. There is also a question whether, if passed in this form, it will not impede the increase of membership of the association. If this motion should be lost, in this shape, I would like to put a motion to refer this matter to a permanent committee, to draft a law after mature deliberation, and correspond with architects to get their opinions, and in that way work up a paper for action at another meeting. (Applause.)

The chairman put the question on the amendments.

Mr. Root: If the competition is to be decided by the experts, I do not see the significance of that clause which insists that they shall be a majority of the committee. They will be a majority if they decide anything.

Mr. Jenney: It is always supposed that the committee is composed both of persons particularly interested and perfectly acquainted with the style of building which is being competed for, and it is necessary to have a certain number of lay brothers as well as experts.

The Chairman: Mr. Root is perfectly right, and his objection seems to me a competent one, because if the decision is to be made by recognized experts, they must necessarily be acting by themselves, or as a majority.

Mr. Jenney: If it is in order, I would move that the whole matter be referred to our board of directors, to be reported upon at next meeting.

Mr. Cochrane: I approve of that, but I think it would be well to adopt the report just as it is, and try that in the meantime, as Mr. Illsley has intimated his intention to offer a resolution to refer the whole matter to a standing committee, who can digest it carefully and report at next meeting. The resolution as it stands is a good thing.

The question being on the adoption of the amendments, they were rejected by a majority.

The report, as submitted by the committee, was then unanimously adopted.

Mr. Patton offered the following resolution:

"*Resolved*, That it be considered unprofessional for a member of this

association to make sketches without compensation, or for a less compensation than that adopted by this association, or preliminary sketches for the purpose of securing work as against any other architect."

The chairman ruled it out of order, the subject of competitions having been disposed of.

Mr. Illsley offered the following resolution:

"*Resolved*, That a permanent committee of five be appointed by the chair to draft a by-law on the subject of competitions, and submit a copy to each member of this association for comment, and thereupon prepare a paper for action by this association at the next meeting.

Mr. Illsley: I also suggest that they print in THE INLAND ARCHITECT such abstract of the replies as they think advisable.

Mr. Cochrane seconded the resolution.

Mr. H. I. Cobb: I move as an amendment that the chairman be one of that committee of five.

Mr. Illsley accepted the amendment.

The resolution as amended was then put and carried.

Mr. Sullivan moved that the committee on resolutions be discharged with thanks.

Mr. Starbuck seconded the motion, which was agreed to.

NATIONAL ARCHITECTURE.

Mr. Jenney said he had received a letter from the editor of the Cincinnati *Commercial Gazette*, from which he read the following:

"I notice with interest the proposed meeting of western architects to form an association, which I hope will be broader in spirit than the eastern is reported to be. I should suppose that a living association would soon come to the question whether the national architecture, such as has come in an irregular way under the supervision of the treasury department, should be allowed to run to such abominations, under appointments by political favoritism, as that of the Mullett order, without criticism or protest from the real architects of the country." The real architects are supposed to be the gentlemen of this association. (Laughter.) This is signed "S. R. Reed."

STATE BUILDING LAWS.

Mr. Lee offered the following resolution:

"*Resolved*, That a committee, consisting of one fellow from each state represented, be appointed by the chair at this meeting, whose duty it shall be to report at the next annual meeting measures looking to the revision of the statutes with reference to the building laws of the several states, to the end that greater uniformity, simplicity and effectiveness may prevail."

Mr. Adler seconded the resolution.

Mr. Cochrane: That resolution was discussed in the committee this morning, and it was thought, at first, to add it to the resolutions on practice, but it was decided that it would be better to make it a separate resolution, and have the chair appoint the committee. The committee was unanimously of the opinion that such a resolution should pass.

The resolution was carried unanimously.

Mr. Flanders, Chicago: I move that a committee of one representing each state in this convention be appointed for the purpose of selecting a place for the next annual meeting.

Mr. Spohr seconded the motion, which was carried.

Mr. Ramsey: I move that a committee of five be appointed to offer a ticket for election this afternoon for permanent officers, and that that the committee nominate two candidates for each office.

Mr. Cochrane moved that the convention adjourn till two o'clock, which was carried.

The convention then adjourned till two o'clock, P.M.

AFTERNOON SESSION.

The convention re-assembled, pursuant to adjournment, Mr. Burnham in the chair.

On motion of Mr. Adler, the reading of the minutes of the previous session was dispensed with.

COMMUNICATION FROM THE PLUMBERS.

The chairman stated that he had received a communication from the plumbers, which he suggested should be handed to the press for publication [and which will be published in our next issue].

THE NEXT PLACE OF MEETING.

Mr. Flanders reported that the committee to whom was referred the selection of the next place of meeting had concluded to report two cities, Chicago and St. Louis, leaving the choice in the hands of the association.

Mr. Clay moved that St. Louis be the next place of meeting.

Mr. Flanders seconded the motion, which was carried unanimously.

Mr. Ramsey: I was going to ask Mr. Illsley to offer our thanks, on the part of St. Louis, for the compliment which you have paid to the city which I represent, but in the absence of Mr. Illsley I will try to do it myself. I feel highly the compliment, gentlemen, and you have my sincerest thanks for having selected the city from which I come as the next place of meeting. I hope that every architect from the city of Chicago, and also every architect that is now visiting the city of Chicago, will be present at the next convention. I assure you that we shall try to do our best and give you as pleasant and as liberal an entertainment as we have had here. (Applause.)

STANDING COMMITTEES.

The chair announced the following as the Committee on Competitions: C. E. Illsley, St. Louis (chairman); William Holabird, Chicago; George Wirth, St. Paul; John W. Root, Chicago; and the permanent chairman of the convention.

The chairman also announced the following Committee on Revision of the Statutes: D. Adler, Illinois; J. Hodgson, Minnesota; E. O. Fallis, Ohio; C. K. Ramsey, Missouri; C. H. Lee, Iowa; James F. Alexander, Indiana; J. S. Matthews, Wyoming; S. J. Osgood, Michigan; Albert E. Cobbe, Dakota; C. A. Curtin, Kentucky; E. Townsend Mix, Wisconsin; C. C. Kemble, Pennsylvania; Sidney Smith, Nebraska.

Mr. H. I. Cobb: I would like to suggest that in case there are state organizations or associations formed in any states that are not included in that list, the president of that state association be added to it.

The Chairman: That, I suppose, is carried by the resolution. It will be so understood, without there is objection.

ANNUAL DUES.

The Chairman: There seems to be some matter to be printed, and there may be some little expenses incident to the work of the ensuing year. There can be but little—a matter of printing and clerical work.

Mr. Hodgson: I suggest the propriety of the fellows here present advancing one-half of their annual dues.

Mr. Adler: We will advance the whole of our dues.

The Chairman: That will forestall the payment of the annual dues at the next annual meeting.

Mr. Sidney Smith, Nebraska, moved that the annual dues be paid in advance at each convention.

Mr. Hodgson seconded the motion, which was agreed to.

ELECTION OF PERMANENT OFFICERS.

Mr. Root: I have a resolution to offer, and I would like to make some remarks in representation of what I consider to be the universal sentiment of Chicago men. I suppose that this afternoon we will ballot for the permanent officers of this association. There seem at present certain reasons why some of these offices should be given to Chicago architects. Resolutions have been passed here of such a character that there are very intimate relations established between the secretary, treasurer, and THE INLAND ARCHITECT AND BUILDER, published in this city. It is also apparently necessary that the board of directors, as such, should have more intimate relations with Chicago than with the outlying towns. For this reason, since it must in the nature of the case happen that a large proportion of these officers must come from Chicago, I think the Chicago men feel that the office of president should not fall to a Chicago man. It seems to us very unfortunate that the convention should seem to be dominated by the strong influence of Chicago men. It is essential for the interests of the association that the utmost democracy of feeling and of fact should exist. The association should be thoroughly cosmopolitan, as far as its name and purposes are concerned. For that reason we of Chicago desire to impress upon you from the towns outside that it is not our desire that a Chicago man should be elected for president. We do not want all the offices, and we do not want all the influence. That which we have next our heart is the good of the association as such, and not merely the good of the state association of Illinois. I beg that you will bear this fact in mind, as being the universal sense of the Chicago architects. With this preamble I offer this resolution:

"That we now proceed to an informal ballot for officers of the association, and that the three persons receiving the greatest number of ballots for president, secretary, and treasurer respectively be considered the candidates for those offices, and be then balloted for in the usual manner."

Mr. Sullivan seconded the resolution, which was carried.

Mr. Cochrane: I move that the president appoint three tellers.

The chairman appointed Messrs. Cochrane, Clay, and Lee as tellers.

While the ballot was being taken, Mr. Adler requested the members of the Committee on the Revision of the Building Laws to remain in the room after the adjournment of the convention, to consult about future action.

Mr. Illsley made the same request to the members of the Committee on Competitions.

Mr. Cochrane announced the result of the informal ballot for president of the association as follows:

Whole number of ballots cast, 52.

Burnham, 8; Ramsey, 10; Illsley, 11; Jenney, 10.

Messrs. Ramsey, Illsley, and Jenney were therefore declared the candidates.

Mr. Randolph inquired whether, in balloting, the fellows were compelled to vote for one or other of these three candidates, or lose their votes.

Mr. Sullivan moved that in declaring the vote, all the ballots cast be read, which was carried.

Mr. Clay asked if the tellers should read all the votes cast on the informal ballot.

The chairman ruled that the resolution did not have a retrospective application.

Mr. Sullivan's resolution, as adopted, was read in the following form:

"*Resolved*, That when the formal vote for president is declared, the name of each person receiving one or more votes be declared, and the number of votes in each case be stated."

Mr. Cochrane announced the result of the first formal ballot as follows:

Whole number of votes cast, 56.

Illsley, 27; Jenney, 7; Burnham, 3; Hodgson, 3; Ramsey, 13; Douglas, 1; Wirth, 1; Mix, 1.

No choice.

The result of the second ballot was announced by Mr. Cochrane as follows:

Whole number of ballots cast, 52.

Illsley, 39; Burnham, 4; Ramsey, 5; Hodgson, 1; Jenney, 3.

The Chairman: Mr. Burnham would ask that his votes be cast for Mr. Illsley, of St. Louis. If there is no objection, the secretary will so count them. Mr. Illsley then receives 43 votes. Gentlemen, the result of the ballot elects Mr. C. E. Illsley, of St. Louis.

Mr. Cochrane: I move that the election of Mr. Illsley be made unanimous.

Mr. Sullivan seconded the motion, which was carried.

Mr. Illsley: Gentlemen of the convention—I did all the speaking I expected you to listen to a few minutes ago. My friend, Mr. Ramsey,

asked me to have a speech ready, but I did not really think there would be a chance for it, and I thought it would be spoiled if I got it ready. I would not be so egotistic as to think that this is an honor tendered to me, but with your permission I will take it as a compliment to St. Louis.

Mr. Sullivan: Take it both ways.

Mr. Illsley: Thank you, sir. I used to be in Chicago, and I will consider myself a sort of connecting link between the two cities. When I get up to Chicago I think the time will be not distant, if indeed it has not already arrived, when the great glory of this lake will be, not in its size, but because Chicago is on it. And now we hope the time will come, after a while, when it will be said of the Mississippi, not simply that it is the longest river on the globe, or the greatest river, if you please—that would be the chief thing said about it—but that it is the river on which St. Louis stands. (Hear, hear!) Gentlemen, one of the principal things that make a city, after all, is the quality of the buildings which its architects put up. That is the thing above all others that draws me up to Chicago every time I can get there. Now, when you come down to St. Louis, we expect you to get the benefit of a good deal of the inspiration we have received from you here, and that will give us us great help in our work of making St. Louis the great city we expect it to be. I have no speech ready to make. I thank you in the name of St. Louis for this honor. (Applause.)

Mr. Cochrane announced the result of the informal ballot for secretary as follows:

Whole number of ballots cast, 52.

Root, 18; McLean, 3; Burnham, 4; Gay, 14; Moulton, 1; Cochrane, 1; Sullivan, 1; Patton, 2; Illsley, 4; Taylor, 3; Lee, 1.

The three highest were: Root, 18; Gay, 14; Burnham, 4.

The Chairman: If the gentlemen will permit me, I would like to request that my name as secretary be withdrawn. While we are waiting for this ballot, the Reception Committee wish to announce that at ten o'clock tomorrow morning there will be carriages at the Palmer House, and that there will be a number of the Chicago architects there, whose services will be at the command of their guests. At eleven o'clock there will be other carriages to be used by the guests. It is hoped that visiting members will allow the Chicago men to show them something of the city. We have adopted as our official guide "Roberts' Manual." There is an article in "Roberts' Manual" which compels us to sign the constitution before the body is considered to be in legal shape. The secretary has therefore taken the constitution from one of the printed forms, and prepared it for signature, and before leaving tonight every one will have to sign this paper.

Mr. Cochrane announced the result of the first formal ballot for secretary as follows:

Whole number of ballots cast, 53.

Gay, 31; Root, 21; McLean, 1.

Mr. Henry Lord Gay, having received a majority of the votes cast, was declared the secretary of the association.

Mr. Cochrane announced the result of the informal ballot for treasurer as follows:

Whole number of ballots cast, 52.

Cochrane, 4; Clay, 4; Patton, 2; Treat, 4; Mix, 8; Boyington, 4; Jenney, 4; Rapp, 1; Randolph, 1; Adler, 6; Flanders, 2; Cobb, 2; Wheelock, 1; Root, 3; Burnham, 1; Ramsey, 2; Illsley, 2; Gay, 1.

The Chairman: Gentlemen, we will now proceed to take a formal ballot for treasurer. It would be well if the treasurer were elected from Chicago, as the secretary and he will have to work together.

The first formal ballot for treasurer resulted as follows:

Whole number of ballots cast, 50.

Root, 6; Mix, 3; Treat, 11; Clay, 3; Patton, 4; Adler, 9; Burnham, 8; Cochrane, 3; Jenney, 2; Boyington, 1.

No choice.

The chairman and Mr. Root both requested that the ballots cast for them be turned over to Mr. Adler.

The Chairman: It has been suggested that as the ballot for a board of directors will be a very long and tedious thing, a committee of ten be appointed to make nominations, and that their action be final.

Mr. Cochrane: I move that the chair appoint a committee of five.

Mr. Moulton seconded the motion, which was carried.

The chairman appointed Mr. Adler chairman, and Messrs. Hodgson, Osgood, Fallis, and McLean.

Mr. Cochrane announced the result of the second formal ballot for treasurer as follows:

Whole number of ballots cast, 48.

Adler, 24; Treat, 16; Burnham, 8.

No choice.

Mr. Frederick Baumann, Chicago, moved that Mr. Adler be made the unanimous choice of the convention.

Mr. Cochrane: You cannot do it by resolution.

The third formal ballot for treasurer resulted as follows:

Whole number of votes, 45.

Adler, 39; Treat, 5; Burnham, 1.

Mr. D. Adler having received a majority of the votes cast, was declared the treasurer of the association for the ensuing year.

Mr. Cochrane: Some of the members think that that committee elect the directors.

The Chairman: They do, under that resolution.

Mr. Cochrane: Under the constitution, that cannot be done. We have got to ballot in open convention for the directors as well as every other officer.

Mr. Randolph: We can instruct the secretary to cast one ballot for the board that the committee select.

Mr. Cochrane: I move that the secretary cast one ballot for the directors.

The motion was carried.

Mr. Adler, Chairman of the Committee on Nomination of a Board of Directors, reported as follows: The committee on selection of a board of directors have concluded that it would be best, for the purpose of securing the efficient working of the business of the association, to select a majority of the directors from Chicago, and also a working majority close at hand, where the business of the association would be done. They have accordingly selected as directors: Mr. D. H. Burnham, Chicago, Chairman; Mr. S. A. Treat, Chicago; Mr. L. H. Sullivan, Chicago; Mr. Sidney Smith, Omaha; Mr. W. L. Plack, Des Moines.

The secretary cast one ballot for the gentlemen named, and they were declared the board of directors for the ensuing year.

Mr. Wheelock: I move we adjourn.

Mr. Hodgson: Before adjournment, I have something to say. Mr. Chairman, and gentlemen of the Western Association of Architects, residents of the city of Chicago, it is the desire of the non-resident fellows of this association to express their gratitude for the very kind and fraternal manner in which they have been received and entertained by you in this your great and beautiful city; and as a non-resident fellow, I take great pleasure in moving a vote of thanks to our Chicago brethren for their uniform courtesy and kindness toward us during our sojourn with them.

Mr. Osgood: I move that all the visiting members take this vote standing.

Mr. Douglas put the motion, which was carried by a rising vote.

Mr. Cochrane: I wish to offer a vote of thanks to the chairman of this convention for the impartial manner in which he has performed his duties, and to the secretary also.

Mr. Sullivan seconded the motion, which was carried by acclamation.

The Chairman: Gentlemen, I feel very deeply grateful for the kindness and uniform courtesy with which I have been treated. You have shown me a great deal of forbearance, which has enabled me to perform my duties, without which I feel that I should have blundered very badly. I thank you all for your kindly courtesy extended to me throughout the meetings of this convention. (Applause.)

THE EXHIBIT EXCHANGE.

Mr. Sidney Smith moved a vote of thanks to Mr. H. L. Gay for the courtesy he has shown this convention, for the use of the hall, and also that the association indorse the system originated by Henry Lord Gay, of a Permanent Exhibit and Exchange of Building Materials and Improvements.

Mr. Wheelock seconded the motion.

The Chairman: The chair puts that motion with a great deal of pleasure. I am very glad to hear it.

The motion was carried unanimously.

Mr. Gay thanked the association for the honor they had done him in passing the resolution.

The Chairman: The chair would say that he has been very efficiently assisted, and that the duties of his position have been very much lightened, and that he has had the pleasure of sitting beside a gentleman than whom no other has given him more pleasure in his company. I would beg leave to ask that the thanks of the entire assembly be returned to Mr. E. H. Taylor for the efficient manner in which as secretary he has performed his duties. (Applause.)

The motion was carried by acclamation.

Mr. Taylor: Gentlemen of the convention, I thank you very heartily for the honor you have bestowed upon me; and I can say truly that I have enjoyed doing all I could to help on this work. I would also wish to say that at Des Moines we have had this convention deeply at heart for months, and that we have endeavored to do all that we could to help it along, and that we are ready to put our shoulders to the wheel, and do our duty in promoting the success of the Western Association of Architects. (Applause.)

Mr. McLean: I move that we adjourn, to meet on the second Wednesday in November next at St. Louis.

Mr. Spohr seconded the motion, which was carried.

The convention adjourned, to meet at St. Louis the second Wednesday in November, 1885.

The Banquet.

Thursday Evening, November 13, 1884.

The visiting architects were entertained by their Chicago brethren at a banquet Thursday evening, in the ladies' ordinary of the Grand Pacific Hotel. About 150 members sat down to the repast, Mr. Burnham presiding. The tables were ornamented with smilax and stands of flowers, and the *menu* was handsomely printed upon a card, upon the reverse side of which was engraved a decorative design drawn by Paul C. Lautrup, which is reproduced.

After partaking of the excellent banquet provided for the occasion, the fellows spent some pleasant hours in sociality, and speeches were in order.

Chairman Burnham, who also acted as toastmaster, arose and said: Whether by an echo of the orchestra's last sweet melody, or by the golden chablis, the sunshine has *somehow* entered your chairman's heart as well as his head, and as I glance about the room, its rays seem to be reflected in smiles from every quarter. I congratulate you on this to be remembered night, and shall any memory be more dear than of this occasion, when barriers are broken down among us gentlemen, when the merry voices of friends are no longer imprisoned behind the portals of our sour faces, but come forth to sport above the feast, attuned to happy thought? Tonight we are all boys again, believing in each other, and when the surrogate—as alas! he must—shall take his turn at our archives, let them speak to him of charity and brotherly kindness; and let him say with a sigh, as he closes the accounts, "I wish I could have been with those fellows on Thursday, the thirteenth day of November."

The first toast was "The New Organization," responded to by Mr. Cochrane.



Mr. Cochrane said: Mr. President and Brother Architects—I think I can truly say that this is the proudest moment of my life. I regard this compliment, to respond to this first toast, as the greatest I have ever received. The notification came so unexpectedly to me this evening that I have prepared no speech, and hardly know what to say. I have jotted down some heads of ideas, since coming here, that struck me as proper to bring out on this occasion; and to premise, I would say that I feel very proud to welcome this body of architects, not only of architects, but of representative men, for of all men in the world of any profession I regard the architect as a representative man. (Applause.) I feel proud to recognize such a handsome body of men. (Applause.) I refer to Mr. Hodgson. (Laughter.) I have been wondering why I have been called upon to respond to this toast. I think I see the reason. Knowing that I couldn't make a speech, they had a scheme here; others would follow me and would so easily eclipse me. That is the only solution I can assign. But the sentiment of our organization is a grand sentiment, the Western Association of architects, and I, having lived in the West so long, have felt very much the want of such an association. I have felt very much the want of the sociability which this has brought out. I have felt very much the want of the support it gives in the performance of my duties as an architect; the advice it affords, and this, I hope, is the commencement of an association that will last forever. I am surprised this evening to see so many architects here. It did seem to me, as we came filing in here this evening, that our western country was even larger than we had thought it, and I hope this association will not be short-lived, and that it will be of great aid to us in our profession in every way.

Secondly, the teaching of this association should be the means of teaching us not only in our professional duties, but in our duties as men, as honest men. For if any man should be honest, it is the architect, for how many men trust their all, as I may say, to the architect in the preparation of plans for the erection of a home?

In the next place, what should constitute an architect worthy to be a fellow of this institution? To begin with, he should be a scholar, versed in mathematics; he should be an artist. He should be a skilled business man. He should be a lawyer in one sense, for I know myself an architect can make a better contract than any lawyer, because he understands all the points that should be embodied in a contract. A member of the association should be a gentleman. To be a member of this association should be an entré into society; it should be his all sufficient credentials, and his card of admission into society. I would say that the association should be for the advancement of knowledge, and for the instruction of its members. It should have its annual conventions. As you propose, at those conventions lectures should be given, and papers read. And the next thing I would suggest would be the establishment of schools, not permanent ones, but annual schools, to meet, say for one month each year, and at these schools the instruction should be similar to that at medical colleges; it should be practical and up to the times; papers by the best talent should be read to young men, and lectures should be given, and when young men attending these schools for a certain length of time can pass an examination by its board of directors, or a committee appointed to examine them, they should have a certificate to practice. The next thing I would suggest would be a library. I think that the association should have such a feature at headquarters, and I would suggest that a library be established, and books and papers collected, where every member of the association can have an opportunity to examine them. Also an art gallery. I have thought tonight if every architect here would give a picture, what a gallery we could furnish! To me it would be full of interest. I think we could have one of the largest art galleries in the United States in a short time. Our friend, Henry Lord Gay, who has established an exhibit here, has set a good example, and a few of us have contributed a few designs there for the edification of our visiting friends.

The next is fees and competitions. This is a very delicate matter to touch upon, and I would say to the association that it should go slow in this regard, because I am of the opinion that whatever fee we establish, whatever percentage, every member of the association must live up to it, or else get out. (Applause.) For myself, I have always maintained the fees of the American Institute of Architects, and I believe I stand by it today, and I want to say, for the edification of younger brethren, that it is better in the end than to cut under.

I suppose the visiting architects have enjoyed the afternoon in visiting the buildings, boulevards, etc.

I want to say one thing in reference to the officers of this association. We have had heretofore a chapter of the American Institute of Architects; we have tried to carry that along, but it has been a perfect failure, and I have regarded it as detrimental to the architectural profession in the west, for this reason, that the majority of our architects did not become members. I attributed that to the fact that the American Institute of Architects really seems to be an eastern institution. I feel that we have not been treated fairly in the West by the institute. I feel that we Western architects have not been represented. I don't blame the American Institute of Architects, for they have been heretofore the head center of architecture in this country. I would recommend, in electing officers, that we old fellows stand back and elect young men, ambitious men, who can give time to the cause; especially the secretary, who needs to be a live man, who will attend to the duties involved. In reference to the location of the officers, the convention will have to decide. I have heard several opinions on that subject. Now I want to make a remark in reference to our friends of THE INLAND ARCHITECT AND BUILDER, who have brought about this convention, and perhaps inaugurated this association more than any one else. (Hear, hear!) I propose three cheers for THE INLAND ARCHITECT AND BUILDER, which were given with a will.

Mr. R. C. McLean: Gentlemen, the pleasure which this moment gives Mr. Muller and myself is almost beyond expression. We have been before you not two years, but during that time have tried to serve you, and to spread abroad, over this western country, those things that would aid the profession, as far as we saw, in the performance of their duty. But we have but commenced. The effort that has been put forth to draw the profession of this great West together has been great, and the result already beyond expectation, beyond our fondest hopes. But we realize that the work is only begun. We have yet to struggle, yet to press onward; and we hope, before our heads are grey, to see much greater results than we see tonight at the commencement of the career of the Western Association of Architects. It is you, gentlemen, who have made it. It is you that will carry it forward. We will be simply the exponents of your wishes. (Loud applause.) You have mentioned THE INLAND ARCHITECT AND BUILDER. Now I have thought of the inland architect and builder in two different ways, and hope I may not be accused of egotism in naming a publication which has been honored by being made the official organ of the body which the gentlemen before me represent, if in response to the toast, I refer to THE INLAND ARCHITECT AND BUILDER, though I give the name another significance. The inland *architect* and builder is one of the oldest of architects; he antedates our honored friend Mr. Van Osdel. In fact he began to disappear when that gentleman opened the first architectural office in Chicago, and today by the formation of an architectural association he has become, officially as it were, extinct, and we will know him no more except as we know the foundations of a building after the superstructure high and grand has risen above them. He existed first among the birds that built their nests in the trees, that long afterward formed the material with which his successors constructed the habitations of man in this inland wilderness. He existed among the beavers and muskrats that built with an architectural symmetry and an architects intelligence, their arched roofed houses in the inland streams and sloughs of this great West. You see he was at this time but an idea, and he not only planned, but he constructed. The Indian followed the beaver and constructed upon his plan, but used different materials when he builded his conelike and picturesque tepee of hoop-poles with walls of buffalo hides. But the early settler brought another architecture, for he constructed the log hut after the plan of the ancient Arians, and then the march of civilization, as it has in all periods of architectural progression, brought the more advanced form of habitation. (You see it is here that the *architect* and builder begins to get in his work.) But still the architect was also the builder; he who planned also constructed, and so our great West has grown; her early architecture was constructive rather than artistic, and it is no small compliment to those in this advanced day in the architectural era of the West, that is but now firmly established and recognized, that the first architects were practical builders. Now all this long epoch of planning and building is changed, for the demands of civilization are such, that the planning is no longer mechanical, but an art. Architecture and building must stand separate and distinct; one represented by minds that must incorporate the fine artistic feeling for color of the painter, the preception for symmetry of the sculptor, and the scientific knowledge and constructive power of the engineer; and the other a like constructive ability, and a mind that can put into practical form the theories of the architect. This, my friends, I take it, is the true province of the architect and the true province of the builder. He who

has both planned and built, if he has intelligence, can still build and can materially aid the designer in the carrying out of his plans; if he has *genius* (and I see many before me who have demonstrated in massive walls and symmetrical proportions that they have) can plan for others to construct, and thus we see the architect and builder at his highest and best; while the architect will no more construct or the builder no more design each will aid the other in the grand work of creating, and it is to the builder of the past that the architect of the future must come for many of his most practical suggestions. I see here those who will design structures that the future centuries will look upon with admiration, and they will be monuments of those that time has made nameless. If the name of THE INLAND ARCHITECT AND BUILDER means anything, it means that it represents this grand creative body whose designing brains will with the builders help, raise structures that time alone can destroy. While being the exponent of the divine art of architecture it will still reach out to the builder too, giving him the best that lies in its power to help him in his work. * * *

The Chairman: We will have to concede the date of the commencement of the inland architect, as Mr. McLean claims it. An organization which certainly deserves honour is the "American Institute of Architects," to which Mr Jenney will be called upon to respond.

Mr. W. L. B. Jenney, in responding to the toast, said: Gentlemen please allow me to thank you in the name of the Institute for your kind remembrance, and to extend to you her motherly love. Some thirty-six years ago the Institute commenced its existence as an incorporated body under auspices not as favorable as those that here obtain. The Institute was alone in her struggle for existence; we have to guide us her thirty-six years of experience and her assistance, besides that of numerous state and other local organizations. The Institute has endeavored to unite in fellowship the architects of this continent, and to combine their efforts so as to promote the artistic, scientific, and practical efficiency of the profession. What the Institute proposed to do for the continent we propose to do for the west. The Institute two years ago had a membership consisting of some sixty-two honorary members, among them such well known names as Sir Charles Barry, Wm. Burgess, C. R. Cockerell, James Ferguson, George Goodwin, Sir George Gilbert Scott, Viollet-Leduc, and others; sixty-four corresponding members, men interested in architecture but not practicing architects; three hundred and sixty-two fellows and associates, architects in good standing located in all parts of the country. Numerous additions have recently been made of which I have no record. The annual meeting of the Institute is usually held in the East, because the attending members are largely from that locality. Each year endeavors have been made to interest the western members and to induce their attendance at the next annual meeting but with little success. To further this end two years ago the meeting was held in Cincinnati, but there was only one member present from west of that city. A year ago the meeting was held in Newport and Providence at the fashionable season. There was but one attendant from Chicago, and none from beyond, westward. A few days ago the meeting was held in Albany, at which there was no attendance from the west beyond Cincinnati and Cleveland. These meetings are exceedingly profitable and interesting. The visiting architects are the guests of the local chapters, who entertain royally, assisted by many liberal minded and wealthy gentlemen, who open their houses, show many beautiful interiors and works of art, and spread out a lunch table with big bowls of capital punch and plenty of champagne and cigars. In spite of all these pleasures and profits the attendance is not large. This year at Albany the visiting architects numbered but twenty-two, and one sees year after year nearly the same faces. Why this small attendance, and why confined to the same persons with but little variation? The immense extent of our country, and the difficulty of being absent from one's office for a number of days just at the time the meetings are held is one; but this is not the main reason. It is because those members who are not in the habit of attending think that as they are not acquainted that they would not feel at home. This is a great mistake. Every person who has once attended a meeting of the Institute will do all in his power to attend every one thereafter. At a single visit he feels he is received with such good fellowship that he counts every member his friend. This good fellowship among members is one of the greatest advantages to be derived from these associations; and it is with great pleasure and with encouraging hopes of a brilliant future that we see so many present at our first meeting, and our first duty is to make friends with each other. The Institute has acquired an honorable name throughout the world, and it is today an honor to be enrolled among her fellows. I hope that our board of directors will sooner or later arrange with the trustees of the Institute some method by which all members of this association will become *ipso facto* members of the Institute, conferring as many benefits as they obtain. There is strength in numbers, and it is a good reputation to be known to frequent good company. This association, united with the Institute, will include nearly every architect of good standing in the land, and some of the more celebrated of Europe. We cannot be ignored. We will establish the profession on as firm a basis and on as high a pinnacle as that of the law or medicine, and secure for its members the same high respectability that is so freely accorded to them in Europe. Fellows of the Association of Western Architects: The Institute extends to you all the right hand, and wishes you a success more brilliant than the most enthusiastic among you even dares to hope. (Applause.)

Mr. McLean called for three cheers for the American Institute, which were very cordially given.

The chairman announced as the next regular toast, "The British Institute of Architects."

Mr. Sidney Smith: Mr. Chairman and gentlemen, I am afraid you have selected a very unworthy subject to respond to such a toast as that. The British Institute of Architects is an institution known throughout the world, and is composed of men whose works today stand prominent throughout the world; and to select a simple and humble fellow of that institute to respond for it, is something more than I expected. But I think you must all agree with me that the institute needs but very little praise. Their works show for themselves; and in this respect I hope to see this association grow up to be what that is. The Institute of British Architects today numbers twenty-two hundred men of all ages. I remember seventeen years ago when I entered an application for membership of that institute, it was with a considerable degree of fear and trembling that I went before that board, composed of old gray-haired venerable men of most severe aspect. But I succeeded, and managed to struggle through the best way that I could. I do not think the intelligence and the enlightenment of our young draughtsmen of the United States need so severe an examination as we had to contend with there. The subjects were perfectly unknown to us until the moment they were asked, and we did not know what was to be propounded to us, but it was upon the fact of our knowledge greatly and upon the answers we would give to those questions, that we got our certificates. While we understand that there is a certain amount of knowledge — practical as well as theoretical — required, our schools today are getting in that condition that they teach the youth of this country all that is required, and it is only the practical knowledge that the architects of this country require the younger branches to learn, to fit them for the position of architect. That is an advantage held out by the teaching in our school systems, but you should have schools specially for the purpose, where the young student not only can acquire the knowledge of drafting what he can do on a piece of paper, but should learn what he can do with his hands, that will enable him at times to take the tools out of the workman's hands, and see what he can do with them. That is the practical knowledge an architect should have. With regard to practical knowledge in our art, it commenced in the East. Greece is the foundation of all architecture. It gradually extended west till it reached Europe and Great Britain. In this country it commenced in the east again. Architecture in the east saw its first developement. It is gradually extending west, and in the west we expect to see its greatest development in the United States. (Applause.) And from what body of men can we expect such civilization and such advancement as from a body of architects and builders, who are the founders of all civilization? As our worthy friend of THE INLAND ARCHITECT has said, the Indians built. Certainly they built, and with architectural knowledge too, to a certain extent; and there is the same ambition among them as there should be amongst us, each of the Indians, and the other aborigines in building and each vying with the other which can build the best. There is the same principle that the architects have today; each one is attempting to do something better than his neighbor. In the course of a few years I hope to see a large association west of the Alleghanies. Cities are growing up on all sides, and architecture is one of the first requirements to make a city what it should be. In all our attempts and in all our dealings, it is unity, it is the comparison of ideas, and the knowledge that we can obtain one from another that will assist in building up that association. (Applause.)

The Chairman: Gentlemen, we have been somewhat theoretical so far. To vary it I propose that we drink to what is very close to all our pockets, "The Office," the response to be make by an eminently practical man of Chicago, Mr. Adler.

Mr. Adler: Mr. Chairman, at this stage of the evening, I think most of us are pretty thoroughly incapacitated for even a thought of what goes on in our offices. (Laughter and applause.) I think it will hardly answer to expend many words on a subject that is so foreign to our thoughts just now. I have heard in connection with the preparations for the work of this convention, from members of the reception and other committees, to whom I have spoken, that they had not, in the whole of their career as architects in this city, seen the inside of one-third as many offices as they had occasion to visit during this time; I think that is a commentary on the deplorable condition in which our profession has found itself as long as I can remember. We have been comparatively strangers to each other with the exception of the few among us whose good fortune it has been to become united in bonds of fellowship in earlier days, when we were working in the same office together. We are all strangers, except when occasionally we are thrown together in the competition of business, and then we have rarely an opportunity of knowing each other in a friendly way. I hope, and I hope it is the hope of all of us here assembled together, that this convention, and the association which we have this day formed, will pave the way to more cordial relations between the members of our profession; and that we shall not hear, from each and every one of us, the remark that he does not know this or the other of the more or less prominent of his professional brethren. It is not so in other professions. Our physicians and lawyers are quite active in the pursuit of their respective callings, but as far as I can observe, they still meet as good fellows at their conventions and in the daily pursuit of their business. Let us hope that we will begin with this day a better state of affairs, and that when the next convention calls us together, it will not be the remark of almost every one of us, that we know but very few of this assembly. (Applause.)

The Chairman: It seems to be a natural transition from the office to the relations that the architect bears to society. Mr. Whitehouse of Chicago, will be asked to explain them. (Applause.)

Mr. F. M. Whitehouse, Chicago: Mr. Chairman, if I had any reputation for eloquence I should be quaking in my shoes on being called upon, but I never thought of such a thing. You ask me to answer to the relations between architecture and society. I have often thought that we are not light of heel nor light of head; society is extremely light of heel and light of head, and therefore I must decline to answer.

The Chairman: Society leads us at once to the dwelling. Let us drink to the toast of "The Dwelling, the Home." (Applause.)

Mr. J. W. Root: In the long history of architecture, the first finished product was the temple; and immediately following this was the dwelling, which was at once a place of residence and a place of business. For this

reason the ancient Egyptian, or the early Greek, whose fitful and uncertain sandals could be seen in the early gray of the morning filling both sides of the narrow street, that led to his home, had a horror all his own, when he thought of his waiting spouse. No excuse of late hours at the office, or taking stock at the store availed him. He had to fall back on the incredible lie that he had been at the temple, just around the corner, paying vows to Isis, or pouring out libations to Zeus. Each one of us can appreciate how difficult this position was, or if we do not now appreciate it, we may in the course of two or three hours. From this crude condition of society, the stride was vast to the grand period of Roman history when Cicero reared that great house by the sea, in whose dining-room the musical gurgle of the last and best bottle of Falernian was mingled with that symphony created by the waves just at his window. In this regime, the dwelling-house reached its best and most noble development. Recent excavations at Pompeii have shown us that in an artistic sense, and certainly in a sanitary way, the dwellings were perfect. I do not know if the Pompeiian architect had his life harassed by the relative merits of the "Tidal wave" or "Meyer and Sniffens latest," but I do know that the Pompeiian doctor had but little to do with those complaints so common to us, arising from bad sanitation. The Pompeiian householder passed his life free from pulmonary and febrile disorders, and he at last surrendered his checks in obedience to a disease which was confessed to be purely eruptive. (Laughter and applause.) From that time to today is certainly a long transition. The architect of today who devotes his energies to the designing of dwellings finds himself confused by a problem, the complexity of which is much increased by the voice of the lady of the house. Unless all the ancients, except the husband of Xantippe, were infamous liars, madame had in olden times but little to do with designing of the house; today she has by large and increasing majority. Who does not recollect that memorable time, as if it were yesterday, when the unblooming monotony of our office was invaded by the *frou-frou* of silk and by the smell of patchouly, by madame? (Laughter and applause.) We were engaged in designing a cathedral, which we felt should surpass Cologne, for at that time the building of cathedrals and other vast and purely ideal structures was the most important factor of our practice. On the advent of this visitor, we were painfully aware that we were not in reception costume, and our access to the wash basin was prevented by the chair on which madame sat. Do we not all recollect the beautiful plans on scented note paper which she had carefully sketched out at home? In this plan the staircases were eight inches wide and four feet long. (Laughter.) Each room of this house was about 25 feet feet square, and the entire size of the house could not exceed 30 by 30. (Laughter and applause.) There were bay windows and oriels, towers, and stained glass; ingle nooks till you could not rest; and the entire cost of this magnificent affair, executed in cut stone, was not to exceed $4,000. (Laughter and applause.) After days of industry and labor, and after many cold sweats, the plans were drawn, and estimates were obtained; and it is needless to remark they were preposterously high. New plans were drawn, and new estimates obtained, and the house built, but alas! how entirely devoid of all this magnificent efflorescence, and all these beautiful accessories; and with this painful episode our gallantry as architects received a blow well nigh deadly. But I beg you, gentlemen, to recollect how many changes have taken place since then; how many vagaries, how many whims, so many indeed that it seems to me it would be well to reflect that a little conservatism would perhaps be desirable at present. Reflect that underneath all these shifting fashions there lie certain primitive and essential facts. When our first parents were raising Cain (laughter) that then hopeful boy was, by his mother, shingled according to plans and specifications as much in vogue now as then; and as far as the essentials of raiment was concerned, the infant fig leaf has not changed since then, except in this respect, that the fastening thorn has bloomed and blossomed into a safety-pin. (Laughter.) These facts lying as they do at the very base of humanity will serve to partially illustrate the central truth, but perhaps I can better illustrate my meaning to you by suggesting what a house should not be, and what it should be. First, a house is not a band wagon, though it might sometimes seem that it was; nor is it a circus tent. Second, it is not intended that the house should suggest that it had been struck by an earthquake. A house is not intended for dolls nor children, but for grown up people. It should not suggest that it was built from the top down, nor that it should be suspended by the chimneys. (Laughter.) There ought to be no confusion in the minds of its occupants between the fireplace and the ice box. I will now suggest to you what a house is. First, it is to be lived in; and for this reason it ought to keep out cold and water, but not whiskey. (Laughter.) Second, all the windows are intended to be looked out of. Third, the bay windows should be so constructed that they should be accessible at least by a very long ladder. Fourth, whatever we first intend as to the house, its secondary intention is that it should consist of a large number of very convenient closets, connected by rooms. (Laughter.) Fifth, it is essential in this house also that in each room two pieces of furniture can be made to occupy the same place at the same time. The windows should be arranged in such a manner that no particle of dust can possibly intrude, and so that the freest access of air can be had. The water-pipes should be so arranged that they will boil in the coldest weather. The house must be so built that no insect or rat can possibly get in, but if a rat gets in, the house must be so arranged that it will fall upon him and crush him. The heating apparatus should be so arranged that when the windows are open the heating apparatus will heat the blood. (Laughter.) Gentlemen, I have given you my conscientious and philosophical views. If you will follow them, you will be blessed in the land, and every female client will rise up and call you blessed. (Laughter and applause.)

The Chairman: The next toast will be "The Store," responded to by Mr. Ramsey, of St. Louis.

Mr. Ramsey: Gentlemen, When I came to Chicago I did not expect to be called upon to address the association in any manner whatever. I am not in the habit of making addresses before small organizations, much less large ones; and certainly I shall not attempt to outdo my friend Mr. Root. As Mr. Burnham has suggested, we shall go from the frivolous to that which is serious, from the fig leaf house to the store. (Laughter.) I will endeavor to make a few practical remarks about the store or warehouse. You are all well aware that in the march of civilization the store has grown from the mere shop, perhaps 10 by 20 feet, in the village, with the dwelling either in the rear or above, to be a palace devoted to the uses of commerce. To be sure, many of the buildings are plain and unpretentious in their construction, but nevertheless they are palaces of commerce, and as such ought by the architects to be treated in a becoming and fitting manner. Stores or warehouses intended for purely mercantile pursuits, in the heavier trades or wholesale business, ought in my judgment to be ornamented as little as possible, or in such a manner as to present a unique, well studied design. The construction should be from the foundation up. The base should be broad and liberal; the walls of sufficient strength to carry the superstructure. The construction should in no manner be hidden, but should always be brought to the surface and well defined. In passing from that which is for the heavier commercial purposes to that which is for retail or fancy business, the architect has in that class of business more freedom, and can show more of his artistic genius, by introducing ornaments of architectural beauty; but still at the same time he should be governed by good sense and propriety, and nothing should be allowed to be introduced into the building which is not in a manner useful as well as ornamental. The one thing that architects should endeavor to foster and to cultivate is that buildings, for this purpose, while not being constructed fire-proof, should be so designed and so built that fires will have as little effect on them, and do as little damage, as possible; in other words, wherever it is possible without unduly increasing the cost, the structure should be made indestructible by fire. Our piers should be built of masonry, and where columns are introduced, they should be protected in a proper and suitable manner. The floors should also be constructed so that in case they are destroyed by fire, or weakened by fire, the safety of the entire building is not dependent upon their remaining in the position that they were originally placed; in other words, care should be taken that one portion of the building can give way, perhaps, without destroying the entire building. (Applause.) Now, gentlemen, we shall have to decide very soon where the next meeting of this association shall be held; and as tomorrow is probably the last day we shall be in session, it might be well for us as we go home to think about that. While I do not wish to dictate to the members of the association where it shall be held, I would like to advance the interests of St. Louis (applause) and I can assure you that if you came to St. Louis we will endeavor to entertain you as liberally as possible. I do not say we shall give you as grand a banquet as this, but at least we shall do our best. (Applause.)

The Chairman proposed "The Draughtsmen," and called upon Paul C. Lautrup to respond.

Mr. Lautrup responded in a witty speech, which was heartily enjoyed and applauded throughout. He closed with the following:

I have been a draughtsman all my life, and I have often thought I would feel very happy to be an architect. I see many heads around me now that have taken me into real fellowship. You have given me the honor to say a few words for the draughtsman, and I feel that though I am simply a draughtsman, I have been generously received this evening among architects. So much honor has been paid tonight to the draghtsmen that in the name of all other draughtsmen, I thank you deeply. (Applause.)

Three cheers were given for the draughtsmen.

The Chairman: The next toast is, "Fees and Clients," responded to by Mr. Lee of Des Moines.

Mr. Lee: This subject of fees and clients is one which I may say is foreign to me. It is many a long and weary day since I have seen a client, and as for fees, I scarcely know how to look at them. (Laughter.) There may be such a thing as clients and fees in architecture; I have not heard the proposition reversed. But there certainly is a relation between clients and fees, and I fear too often the architect devotes himself more especially to the latter than to the former. I hope it is not true; I hope my fears are groundless; if they have any ground in the past, I sincerely hope from this day forward that the fee will be placed in the background, and the wants of the client shall constitute the object and ambition of the architect. Fees, of course, we cannot do without; and I have often thought, more especially this evening, as so many in responding have said they were not prepared, I might with equal truth say that our honorable chairman and myself have been in correspondence about this matter, that I should respond to this toast. I have wondered, as several gentlemen referred to the fees of the profession, if there were such things as clients in the past. Did the architect ever have one, and if he had one, was it a madame or was it not? Architects in the olden times had but few fees and fewer clients. On what basis their fees were regulated, history sayeth not. That they were rich, history is equally silent; but judging from the opulence spread out here tonight, some of our friends in this good city have received some fees, and to do that they must have had some clients. While these two things are essential, the client should be the first consideration; and if my friend at the opposite end of the room (Mr. Root) will take in the measurements of his madame, and adapt his plan to what is there presented to him, he will not have so much difficulty; he will at least have the skeleton of his plan. All that is necessary is that he shall weave into that skeleton the form and the fibre of his own soul, and then, if his design is not worthy of the approbation of his fellows, it is because his work is not faithfully done. (Applause.)

The Chairman: Gentlemen, it is with regret that your chairman feels called upon to announce that we are on the verge of another day. I feel that we owe some thanks to the committee who have had the feast in charge. Their work has been well done. (Applause.)

Mr. Laufrup called on Mr. Treat for a speech, but that gentleman declined, and in a few minutes more the banquet hall was emptied of its contents.

[The stenographic report of the convention proceedings and the banquet speeches was furnished by William J. Guest, stenographer, of Chicago, who merits this mention for his thoroughness and accuracy.]

PUBLISHERS' DEPARTMENT.

An Important Elevator Improvement.

A RECENTLY invented attachment, which has for the first time been placed in practical operation, on elevators is to be seen at the new City Hall buildings, Chicago, which are being supplied with elevators by the Crane Bros. Manufacturing Company. As is well known the more common way of operating elevators has been by a wire cable connecting with the machine, and its many disadvantages have been noticed; the severity of this continual exertion being indicated by the heavy gloves or piece of rubber pipe which the operator uses in order to more firmly grasp the rope.

All this has been superseded by this latest improvement in the Crane elevator. At the City Hall are found two elevators side by side, alike in construction and with equal motive power; one has the common double cable of one-half inch wire rope connecting with the machinery, the other governed by an apparatus which is one of the most simple and useful known on elevators; it consists of a square tube about two inches in diameter made of drawn brass, to give it lightness. This brass tube hangs on a mechanically perfect pivot at the top of the elevator shaft and passes downward through the shaft outside of the car and connects with an automatic valve at the bottom.

This valve is simply auxiliary to the large valve which controls the machine, enabling a much closer command of speed than by any other system in use. Inside the car is a handle or lever which the operator uses as a locomotive engineer does the reverse bar to control the speed or direction of the engine. The slightest movement of a finger can easily operate the lever, and it places the elevator fully under the control of the operator, as the speed can be governed to a nicety. Though the operation of the valve is gradual, the car can be stopped instantly when running at full speed, and the lever obviates the difficulty usually observed in bringing the car to a standstill exactly at the floor level, the cable necessitating a slowing up as the floor is neared with a diminished speed and consequent loss of time.

The simplicity of this invention is one of the most valuable features, as it has no complicated mechanism to get out of order; it acts instantly and perfectly, and the march of improvement will soon carry the cable arrangement out of sight, superseded by this valuable improvement.

The Crane Bros. Manufacturing Company are to be congratulated upon this addition to the perfect operation to their elevators, and deserve all due credit for their enterprise and ingenuity. Beside the elevators which they have placed in the new City Hall, this attachment will be connected with about twenty of their elevators. As it is equally applicable to either their steam or hydralic elevators, the time when they will exchange a cable for this apparatus will be governed by the time taken to manufacture the necessary number of attachments. The operation of this valuable elevator improvement should be examined by architects generally. Elevators with this improved device are being furnished by Crane Bros. for the new Board of Trade, the Gaff, Mallers, Traders, Memery and other large office buildings, and its general adoption will be an important step in the direction of an improved elevator service.

The Latest in Gas Fixtures.

IN the multiplicity of designs in gas fixtures it is valuable to know that special work can be obtained from one of the leading gas fixture manufacturing companies of the country. The W. C. Vosburgh Manufacturing Company, so well known in the East, and the western branch of which at 184 and 186 Wabash avenue has become so popular under the management of Mr. Chas. H. Littlefield, beside their large and elegant display of fixtures always hold their artists at the command of architects for the carrying out of special designs. The styles offered by this firm are always original and exclusive, and their establishment in Chicago has given to the West all that an eastern visit can supply, their locating in Chicago being one of the important events that have marked the advance in an increasing demand for artistic work in the interiors of houses in the West.

An Important Hardware Catalogue.

BUILDERS as well as architects will be interested to know that the largest dealers in builders' hardware in the West, Messrs. Orr & Lockett, of Chicago, have just issued a 340 page illustrated catalogue of their general goods and trade specialties, which they send to any architect, builder or contractor upon application, or one can be procured by calling at their establishment in Chicago, at 184 and 186 Clark street. The hardware, tools and cutlery departments of this firm are indexed in an alphabetical list, which gives ready access to the pages containing the information desired. As almost every article is illustrated, the specialties handled, many of which are entirely new to the trade but selected for their standard qualities and utility, can be seen, as it were, in sample. This is the first catalogue this firm have published, and is creditable to them, as well as a great accommodation and benefit to their patrons throughout the country.

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APPLICATIONS for positions from competent draughtsmen continue to increase because of the natural decrease of work at this season. Architects are requested to remember the fact that we have the names of a number of good draughtsmen on file, and will be glad to place them in communication with architects needing additional service.

CHARLES E. ILLSLEY, M. A. C. E., of St. Louis, who is honored by being the first president of the Western Association of Architects, was the unanimous choice of the convention that elected him. Mr. Illsley is, beside his high rank in the profession, peculiarly fitted to represent the architects of the West, his education being of a practical as well as theoretical nature, giving him a peculiar advantage in the performance of those duties which come within the province of his office. Biographically speaking, his father, Mr. Edward Illsley, was born at Portland, Maine, and pursued the business of a building carpenter in Boston, New York City, Newark, N. J., Chicago, Ill., and St. Louis, Mo. He moved to Chicago in 1853, where he was identified with church and residence work, the building of the Cook County hospital, etc., for Carter & Bauer and other architects. Afterward he resided for a time at Batavia, and from thence moved to St. Louis in 1869, where he has continued the business of a building contractor to this date, his name being mentioned as the contractor for the framing and floors in St. Louis Exposition building. Mr. C. E. Illsley was born in New York City, May 29, 1842, and graduated at St. Louis High School in 1860. Following this a college course was pursued at Washington University, St. Louis, from which he graduated as A. B. in 1864, with the honor of the salutatory in Latin. After an architectural and engineering course of study, Mr. Illsley graduated at the Rensselaer Polytechnic Institute at Troy, N. Y., in 1867, with degree of C. E., returning to St. Louis the same year to accept a position in the Washington University as instructor in mathematics, descriptive geometry and civil engineering, resigning after a year and a half to take a position as assistant city engineer in the street department of St. Louis city government. In 1872 Mr. Illsley began business for himself as architect, continuing in this to the present time. As an architect Mr. Illsley, though a comparatively young man, ranks well in his profession, and, as the St. Louis correspondent of the *American Architect and Building News* since the establishment of that journal, has won a more than local reputation. As president of the Western Association the unanimous opinion is that the office was well placed, and the association will be presided over with dignity and ability.

THE architects of Illinois are about to assemble in Chicago, those of Missouri at St. Louis, those of Nebraska at Omaha, and those states not heard from but which were represented in the recent convention of western architects, are contemplating movements toward the carrying out of the provisions for the forming of state associations made by that convention. That the mere fact of a national association being formed, has already resulted in good is apparent from the general attention architectural affairs are receiving in every quarter. But it should not stop here. If American architects and architecture is to be permanently benefited it must be aided in its advancement by the leading members of the profession, and in no way can its interests be better promoted than by active association. This is not only true in this country but in Europe. An English journal in speaking of the establishment of competent architecture and realizing that while it would be just, it would be difficult to have the standing of architects regulated by laws as in the case of physicians, lawyers, etc., says that "one of the best means for accomplishing the object is the establishment of local architectural societies." The profession in this country have now an opportunity for securing that advancement, and we are glad to see that it is being improved.

ON July 4, 1848, the corner stone of the Washington monument was laid, and on the 6th inst. the cap stone was laid in the presence of the architect and engineer of the structure, Col. Thos. Lincoln Casey. The erection of this monument has given to America the highest structure in existence, the distance from the ground to the top of the cap stone being five hundred and fifty-five feet. The original design of the monument included in it, contributions of stone from each state in the union. The cap stone is marble, about five feet high, and weighing thirty-three hundred pounds, with an apex of aluminum, five inches across the base. This material was selected for its comparative freedom from oxidization, and for its value as a non-conductor of electricity, a copper rod connecting with the main column of the elevator shaft, forming a perfect electrical conductor. The four sides of the cap stone contain appropriate inscriptions. The history of the erection of this monument has been a checkered one, distinguished by periods of activity, followed by semi-abandonment, usually governed by the possession or lack of funds in the hands of the building committee. As an architectural and engineering feat it is one of the most remarkable examples

in this country, and its completion is exceedingly creditable to Col. Casey, who has had charge from its inception. One circumstance of its erection was the replacing of the foundation after it had attained an altitude of one hundred and fifty feet, embracing a weight of seventy one million five hundred thousand pounds. The laying of the final stone of this towering obelisk was attended by the firing of twenty-one guns and other demonstrations, but a more elaborate celebration of the event is reserved for the 22d of February.

AGAIN the method of conducting the supervising architect's office is to come before congress, and this time in a more practical shape than ever before. A bill has been prepared by Chairman Stockslager, of the house committee on public buildings and grounds, and will shortly be placed before congress, which is designed to reform the present method of constructing public buildings. The main provisions are substantially as follows:

It defines the duties of the supervising architect of the treasury, provides that he shall receive a salary of $5,000 a year, and have two assistants at a salary of $3,000. It provides that whenever a public building is authorized which is to cost $50,000 or more, architects shall be invited to furnish competitive plans and specifications therefor. These plans are to be submitted, unopened, with the authors unknown, to a board to be appointed by the president. The successful competitor is to receive for his plans and specifications compensation varying from three per cent if the building is to cost not more than $200,000, to one per cent in case it shall cost more than $2,000,000. The board is also to be authorized to award prizes to the meritorious designs. The total amount of these prizes shall not exceed one per cent when the building is to cost $100,000, and one-half of one per cent when it is to cost over $500,000. The successful competitor is to oversee the construction to the extent of seeing that the plans and specifications shall be complied with, and for such service he shall receive one per cent of the cost of the building. The supervising architect is to app int superintendents of construction of public buildings, who are to have practical knowledge of their work, and to receive $2,500 a year each. He is to make annual reports giving a list of all the public buildings, their cost, the cost of the sites, the amount expended in repairs during the year, and other information. He is also to report upon all applications for the construction of new buildings, such report showing the population of the places, the increase of population, the revenues collected by the government, the amounts paid for rent by the government, etc. He is also to be required to test building material sent to him from any part of the country and to publish the results of such tests. The bill provides penalties for the furnishing of false estimates by architects, for neglect of duty, for receiving inferior materials by superintendents, inspectors, etc., for the furnishing of inferior materials or the doing of inferior work by contractors, and for neglect of duty by the supervising architect.

We have in the past, in discussing the method pursued by the government in this matter, outlined a very similar course, and are glad to see that those recommendations are thus early bearing fruit. While we still hope that some method will be devised by which the important work of building public structures may be carried on outside of, and entirely free from the possibility of political interference, a thing that is impossible when the architect is a political appointee, the carrying out of the above proposed plan—with such limitations and changes as we will mention—cannot but be a great improvement, and one that will pave the way for a still better plan in the future. But we will confine ourselves to the present condition of the office and the proposed changes.

WHILE the recommendation of assistants at three thousand dollars a year is as it should be, the number should read "*not less* than three," as the constantly increasing work of the office may call for an additional number, and the salary of the supervising architect should be placed at not less than ten thousand dollars. This is but a small compensation for an architect, receiving the appointment, to leave his well established practice. For the proposed compensation it would be difficult to induce a first-class architect, such as only should fill the position, to take upon himself the onerous duties involved. While the competitive system is one that we have strongly urged, and will do more than anything else to give to this country buildings that will be the architectural models for future generations of architects, the amount of prize money, and the percentage to be paid to the successful contestant should only be settled upon by the committee after conference with the officers and directors of the American Institute of Architects and the Western Association of Architects, as it will be from these bodies that the competitors will likely come. They, confined by their professional schedule —which is the same in both associations—would be unable to compete otherwise, and the work fall into the hands of those who do not belong to these associations, the result probably being no improvement upon the present national architecture. The committee should, in every case, arrange so that the influence of party can have no effect upon the action of architects or contractors, and for this reason, and because of a better knowledge of the members of the profession, the president of the A. I. A. or W. A. A., according to the location in the country the building is to be erected in, should select the judges rather than the president of the United States. Care should also be taken that the majority, if not all, the judges should be expert architects. We earnestly hope that the bill will be altered to embody these suggestions, and that it will speedily come before congress for immediate action.

SINCE writing the above, which is based upon a synopsis of the bill telegraphed from Washington, we have received a printed copy of the report, in which we find that its provisions are, in some respects, better than as at first reported, especially in regard to the board of experts, which could hardly have been better selected. The board is recommended to consist of five, including the postmaster-general and attorney-general, representing the two departments that are most concerned in the building of post offices and custom houses, and the chief engineer, the supervising architect, and one other architect, representing the expert side of the board, and placing this in a majority and tallying exactly with our recommendations. The success of the whole plan now seems to hinge upon the arrangements made for the conducting of competitions, and in this the committee cannot do better than confer with the national associations, as their rules being the outcome of practice and experience will greatly add to the value and the practical working of the bill. The bill provides that the supervising architect's office, in its present form, shall cease to exist April 1st, 1885.

IN reviewing an article upon "Building operations in the United States," which has appeared in several English building journals, simultaneously (without credit to any journal and no authorship indicated), we find a statement of the situation that must have been compiled from *bona fide* statistics, and that as far as figures go, is in the main correct, but in other particulars in some cases exaggerated, and in others notably untrue. The point we would call the attention of English readers to (for to the American the statement needs no correction), is in regard to the construction of large buildings in Chicago. In this city a building ordinance is rigidly enforced which prohibits the erection of any building of frame construction. It provides for a brick or stone wall twelve inches in thickness for a building one story in height; sixteen inches in thickness for two or three stories, and so on upwards. The construction is thus kept within a safe limit, although the improvement of the ordinance in several ways, suggested by the citizens committee, would be of benefit. In regard to the buildings for office purposes we would state, that there are at least a dozen buildings of recent erection of ten stories, averaging one hundred and fifty feet in height, and all are built thoroughly fireproof. This means that the walls are of brick, and the construction of floors, roofs, etc., etc., are of iron covered with hollow fire-clay tiling, a material that is also used for partitions and for arches between floor joists and roof trusses. With this construction the occupants are perfectly safe, as the contents of a room in any of them could burn out without disturbing the occupants of the next. Large tanks of water on the roofs supply water for lavatory and sanitary purposes above the height reached by the city water

pressure, the hydraulic elevators being also supplied in the same manner. In regard to the dry goods and other whole sale establishments of Chicago, while more than one employ twelve hundred hands the height is limited by custom to five and six stories, and all the large ones, though not thoroughly fireproof, as the term is understood, are protected by such precautions as fireproof paint, pipes arranged to flood floors, mercurial fire alarms, watchmen, fire escapes (which an ordinance compels owners to place upon all buildings), and all aided and presided over by the most perfect fire department of any city in the world. The enterprise of *The Building News* and the *Builder's Weekly Reporter* of London, in which the article referred to appeared, is commendable, and their figures in this instance, as well as in many other articles where American affairs are spoken of, are remarkably correct.

AT a recent meeting of the Paris city council M. Cernesson, in behalf of the Viollet-le-Duc Society, presented to the secretary a copy of the works, including the drawings and writings, of Viollet-le-Duc, with the remark that the publication of the work was attempted in honor of the author, as the society deemed this to be a more enduring monument to that great genius than any that could be erected in stone or marble, and asked the assistance of that body in the publication. M. Hattat, president of the society of the Beaux Arts, recommended the ordering of one hundred copies, to be distributed among the libraries of France and the members of the city council. The proposition was upon ballot accepted by the city council, and the expense, forty-eight hundred francs, it was arranged should be charged to the Beaux Arts fund, one-half in 1885, and the remainder the year following. In the advancement of scientific knowledge, and the rewarding of merit of genius this is only another instance where the French people have shown their superiority over other civilized nations.

ST. LOUIS is on the eve of another important competition—that for the planning and erection of the new opera house. Judging from past experience, it will be hard to get the best architects to make plans, and certainly not upon the same arrangement as was adopted by those in charge of the Exposition Building competition. Why cannot corporations and individuals learn at once that good architecture needs good architects for its accomplishment, and that the only way to secure these is by engaging the best talent, and paying for it in a business-like manner, and that the lottery scheme method that was pursued in the competition before referred to can bring nothing but dissatisfaction to all those who engage in it. St. Louis has an opportunity of securing the finest opera house west of New York if she will but properly conduct the proposed competition.

The Development of New Phases of the Fine Arts in America.

BY P. B. WIGHT.

PART II.

ABOUT the year 1860 there came to this country a young Englishman He had not had the advantage of a good education and had not moved in what is called "good society" in his own country. He was in fact a self-made man, and had the natural instincts of an artist. He had attended the free night school for drawing which Ruskin, for a time, carried on in London for the education of workingmen. There he had learned to draw from nature correctly, faithfully, lovingly. Being fortunate in meeting the lady superintendent of the then just organized School of Design for Women in the Cooper Union, he obtained a position as teacher of drawing in that institution. It was not long before he made, or rather found many strong friends. For, to his surprise, there were a few sympathizers with the views he had imbibed in the Ruskin school, to give him a cordial welcome. He even found a few artists who had long sought to emancipate themselves from the prevailing school of conventionality, and as many architects. By degrees those, who became his friends, became also each other's friends; and as these friendships ripened, it became their habit to hold informal meetings at each other's studios or residences, to talk over those art matters which were of so much interest to them.

At one of these social meetings it was suggested that a society be formed to advocate the reforms which, as individuals, they all were striving to effect, and it was his suggestion. The name of this enthusiast was Thomas Charles Farrer.

Without going further into details it may here be mentioned that such a society was formed in New York on the 27th day of January, 1863, a little more than twenty-one years ago. It was the first and only art society ever established in America which had a settled purpose and mission. On the 18th of February the organization was completed by the adoption of the *Articles of Organization*, and the naming of the society, which was called *The Association for the Advancement of Truth in Art*. The articles expressed in the most concise form the principles of the English Pre-Raphaelites and the Gothic revivalists, to which I have only incidentally referred.

These articles covered the whole ground. Firstly, defining the principles on which are based all right art, and secondly, stating what they proposed to do to carry out those principles, and, thirdly, the form of organization.

I cannot do justice to the first of the articles without giving it entire. It says:

"We hold that the primary object of art is to observe and record truth, whether of the visible universe or of emotion. All great art results from the beauty and perfectness of God's creation, and is the attempt to tell the truth about it. The greatest art includes the widest range, recording with equal fidelity the aspirations of the human soul, and the humblest facts of physical nature.

"That the imagination can do its work, and free invention is possible only when the knowledge of external nature is extended and accurate. This knowledge, moreover, with sympathy and reverence, will make happy and useful artists of those to whom imagination and inventive power are denied.

"That beauty, in the vain pursuit of which generations of artists have wasted their lives, can only be appreciated and seized by those who are trained to observe and record all truths with equal exactness. True art representing nature as she is, discovers all her beauty and records it all. The art which seeks beauty alone, disobeying Nature's law of contrast and narrowing the artist's mind, loses beauty and truth together.

"Therefore, that the right course for young artists is faithful and loving representations of nature, 'selecting nothing and rejecting nothing,' seeking only to express the greatest possible amount of fact. It is, moreover, their duty to strive for the greatest attainable power of drawing, in view of the vast amount of good talent of wit, knowledge and pleasant fancy, which is lost and wasted around us every day from the mere want of ability to give it due expression.

"We hold that in all times of great art there has been a close connection between architecture, sculpture and painting; that sculpture and painting having been first called into being for the decoration of buildings have found their highest perfection when habitually associated with architecture; that architecture derives its greatest glory from such association; therefore, that this union of the arts is necessary for the full development of each.

"We hold that it is necessary in times when true art is little practiced or understood, to look back to other periods for instruction and inspiration. That in seeking for a system of architecture suitable for such study, we shall find it only in that of the Middle Ages, of which the most perfect development is known as Gothic architecture. This architecture demands absolutely true and constructive building. Alone of all the styles that have prevailed on earth it calls for complete and faithful study of nature for its decoration. It affords the widest possible field for every decorative art, sculpture of natural forms, for painting of every noble kind, for the rendering of noble forms and color in glass painting, mosaic, metal working, pottery and furniture; and it is based upon a system of building more nearly than any other that which we at present need. The exact reproduction of medieval work is only desirable so far as it may be necessary to regain the lost knowledge of the vital principles that controlled it. Out of the careful study and application of these principles a true and perfect architecture is sure to arise, adapted to all our wants and affording the most ample field possible for the display of artistic power.

"We hold that the revival of art in our time, of which the principal manifestations have been in England, is full of promise for the future and consolation for the present. That the Pre-Raphaelite school is founded on principles of eternal truth. That the efforts for the restoration of the

so-called Gothic art have been in the main well directed. That the hope of true art in the future is the complete and permanent success of this great reformation."

The second article after stating that the objects in forming the association are to secure encouragement and mutual instruction, to assist meritorious artists who may need help, to develop talent, artistic ability, especially among the class of mechanics, and to educate the public to a better understanding of the representative arts, goes to say that, to secure these objects they propose, as they have means and opportunity shall serve:

First, to hold meetings at which papers shall be read on matters connected with art, and at which members may exhibit their works and indulge in such free discussion and criticism as shall tend to their immediate advantage. Also for the discussion, formal or informal, of art subjects, and for remarks from the members concerning matters of observation, experience, reading or thought, which they may think noteworthy.

They propose, secondly, to buy works of art which they might approve, and to give commissions to deserving and faithful students for truthful studies from nature. Also to assist, pecuniarily, young men of promise, who may show a desire to study art rightly.

Thirdly, to offer prizes for open competition in the arts of drawing and painting, sculpture and architecture, and in the various branches of ornamental manufacture and design.

Fourthly, to conduct or assist public exhibitions of naturalistic art.

Fifthly, to conduct public lectures whether by members of the association or by persons invited for the purpose, and

Sixthly, to conduct a journal or magazine for general circulation, containing critical notices and essays, with any matter that may tend to advance the cause, and affording the association a convenient medium for such appeals to the public as it may be expedient to make.

The remainder of the article relates mainly to the details of the organization. Among other things they maintained that, in order to keep up a high standard of excellence in the work of its members the association assumed authority to criticise such works, and the members agree to assent to such criticism.

Of the means to be used to secure and promote the objects of the association the first and sixth only were ever employed to any extent, though, as individuals, many of the non-professional members assisted the professional ones as proposed in the second article, which action, worthy though it may have been, brought down upon the association the charge of the scoffers that the American Pre-Raphaelites bought their own pictures.

The holding of meetings was a matter which mainly concerned those who attended them, and for whose mutual benefit they were intended. But that which concerned the public and which is of main interest now, as having wielded an influence in the advancement of æstheticism in America, quietly, slowly and almost imperceptibly, was the establishment of the journal. The decision to publish it was made March 28, 1863, and it was the boldest of all the tasks undertaken by the new society. It was called *The New Path*, and the first number, a modest 12 page octavo, appeared in May following. Thus in three months from its organization the journal, to which its main efforts were to be directed, appeared.

It continued through two volumes. The first was issued in successive monthly numbers of 12 to 16 pages each, according to the amount of material prepared. The second volume commenced in May, 1864. Three numbers were printed in succession; then after an interval of nine months the publication was continued, and the second volume was completed with the number for December, 1865.

The circulation never was large, but it was large enough to satisfy the projectors that what they had set out to do had been accomplished. It had never been expected to yield a profit. It was undertaken with the expectation that it would involve a considerable sacrifice of money, but no sacrifice was ever more cheerfully made than this. The original association never levied any dues upon its members. As its by-laws said, it would be supported only by voluntary contributions, and its members always contributed according to their means. Whenever money was wanted for any purpose, the subscription was invariably filled without delay, and it paid all its obligations to the end. As the second volume was nearing completion, *The New Path* had just commenced to pay its own expenses, for the subscription list was larger then than ever before, and many single copies were being sold. The inquiry, "Why was it discontinued, then?" may naturally be made. The reasons were two-fold. First, its editor and principal contributors had already—through the reputation made by its pages, and the fact that it had created a new era in art literature—been engaged as fine art contributors to other and well established journals of large circulation. Among them were the New York *Tribune*, *The Nation*, and, for six months, the *Evening Post*, while somewhat later one of its editors was a regular contributor to the Boston *Daily Advertiser*. Secondly, it was thought that the original purpose of the journal had been fulfilled. There was little or nothing more to be said, except current art criticism, and to continue its publication would be to simply furnish reading matter only for amusement and occupation, which had never been intended. It was too much of a task to its writers to ask them to continue the work, while it was impossible, for want of material, to replace them. Moreover, they had earned a reputation which had opened to them a wide field for the exercise of criticism of current events in the art world, and they were already at work in it.

There are, in all probability, but few copies of *The New Path* in existence, and it is now considered a rare and scarce book. The following, being the first and last paragraphs of the first article that appeared in it, and of a somewhat prophetic nature, is of especial interest now:

"The future of art in America is not without hope if looked at from certain points of view. The artists are nearly all young men; they are not hampered by too many traditions, and they enjoy the almost inestimable advantage of having no past, no masters, and no schools. Add, that they work for an unsophisticated, and, so far as art is concerned, uneducated public, which, whatever else may stand in the way, will not be prevented by any prejudice or preconceived notions from accepting any really good work which may be set before it. These are solid advantages, hardly possessed in any such a degree by any other society, and make a good foundation on which to build well and beautifully for the future. All the omens are favorable, and the voices of the gods speak very plainly; nothing is wanted but that the priests fulfill their office worthily."

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"A few individuals persuaded of these things have joined themselves together in a society, for mutual strength, and for the better dissemination of these ideas. They propose to print, from month to month, a journal in which they can communicate with others who think with them, or may be led to do so. There is a need of a journal of this sort, in which art can be treated with more justice and a broader criticism than it has thus far received at the hands of our public prints. Most of the writing on art which we find in the newspapers is personal, either in what it praises or what it condemns, and is apt to be feebly apologetic if moved to speak with any directness, as if artists were made of more fragile clay than other men, and were to be much more daintily handled. We hold to a different view, and believe that to be a good, not to say a great artist, a man needs such powers of brain and heart as are quite inconsistent with irritability or unwillingness to hear the words of frank and generous criticism. While we mean that in these pages what we believe to be the truth shall be spoken without fear and without favor, we also aim to criticise on far higher than personal grounds, and to apply the same tests to works of painting and sculpture that all men are agreed to apply to written works of imagination and fancy.

"In conclusion, it may seem that we have given expression to very high and enthusiastic hopes, which are built on very slight grounds of actual performance. There is truth in the criticism, for we cannot point to the works of any one man in proof of the revolution which we predict. But our faith is built on signs which are none the less infallible because they are as yet rather felt than seen. We believe, in short, that at length some new principles in art, few but potent, have been discovered and accepted, and that these principles, taking hold of the younger men, and gradually improving their lives and shaping their work, will in time produce pictures, statues and buildings worthy of the age and country in which we live."

Perhaps the best idea of the nature of its contents and style of its writings can be gained from some of the press notices which appeared plenteously. Its best articles were also extensively quoted and reprinted, which was quite as gratifying to its projectors as its increasing circulation. It is, however, a curious fact that very few artists allowed their names to go on the subscription book, but that a certain number of them were regular purchasers of single copies.

The Independent said of it: "We make it a point to read every number of this bold and original periodical from beginning to end. We are fond of good writing wherever we find it — whether we agree or disagree with the writer; and certainly these pages never lack piquancy. Like the brandishing of a sword that glistens in everybody's eyes, this keen edged periodical brilliantly attacks the vulnerable points of American art and artists. Fearless and honest, it makes havoc among great reputations, and puts the crown of praise on the heads heretofore comparatively unknown to fame. Not assenting to half we find in these successive sprightly numbers, we nevertheless cannot join in the outcry against this adventurous journal. We believe in free speech; *The New Path* has a right to be heard. Nor is it any evidence that a severe criticism is unjust because the artist criticised gets angry. American art needs sharp criticism as much as any schoolboy ever needed a whipping. Many of our artists, who have capacity to adorn their profession and to improve mankind, are deliberately going the wrong road, as if determined to cast away their opportunity, and to make shipwreck of their genius. We are glad of a warning voice, even

though it be defiantly blown. Whether *The New Path* is the right path, we do not undertake to say. We are confident that the great discussions opened by this journal will prove salutary to the best growth of American art."

The Boston *Daily Advertiser* said: "*The New Path* ought to be patronized by all art lovers, for it is the only periodical in the country that ventures to have an independent opinion about art, and, moreover, has any opinion worth hearing."

In addition to *The New Path* the association issued a series of ten photographs from original drawings and paintings, as illustrative of the subject matter of the journal. They were quite extensively sold.

The original society numbered nineteen persons, mostly residing in New York and vicinity. But there were eleven subscribers to the publication fund who were not original members. Of the former, I will mention only those who are more or less known to the public.

John Matthews, now deceased, a well known amateur, but better known from his having been an extensive manufacturer of soda water apparatus, was the president. He made it his study to raise his business to the dignity of an art manufacture. To this day the smallest article made in his establishment is the result of the greatest care in design. He introduced rare marbles and precious stones, which had never before been wrought in the manufacture of such articles; and, being seen by the masses of the people, they have contributed in no small degree to the cause of popular education. Any one who has noticed the soda fountain under the Continental Hotel in Philadelphia has seen an example of art manufacture that serves well to illustrate the improvements introduced by Mr. Matthews.

Clarence Cook, after relinquishing the editorship of *The New Path*, continued for fifteen years as the art critic of the New York *Tribune*, and has published a work on house decoration, "The House Beautiful."

J. Henry Hill, son of the late John W. Hill, artist, still resides at his father's old place at Nyack Turnpike, on the Hudson. He devotes himself to landscape painting.

T. C. Farrer now resides in the Surrey side of London, and practices his art as landscape and figure painter. He was the teacher of and introduced in this country his brother, Henry Farrer. The latter is now secretary and one of the most distinguished members of the American Water Color Society. Mr. Farrer was also the teacher of Francis Lathrop, who first became known to the public by his wall paintings in connection with Mr. LaFarge, in Trinity Church, Boston. He has since contributed cartoons for figure subjects in the Bijou Theatre, Boston, and the Metropolitan Opera House, New York, and is one of the regular corps of artists connected with the *Century Magazine*.

Clarence R. King, an amateur, has been for many years in charge of the government geological survey of the 40th parallel.

James J. Gardner, an amateur, is in charge of the geological survey of the state of New York.

Charles H. Moore, painter, is the instructor in drawing at Harvard University. Three years ago he was the companion of Ruskin, during a four months tour for study in Italy. His water color drawings, from the early Italian masters, made for the university, form one of the most valuable collections of copies in this country.

James E. Munson, amateur, is a law reporter, and his books are the accepted authorities on shorthand writing.

Russell Sturgis, of New York, was one of the first designers of constructive and artistic furniture, and architect of the Yale Memorial Chapel, Durfee Hall and many other buildings. He was appointed professor of architecture in the College of the City of New York, served one year and retired and passed many years in Europe. He was for many years art critic of *The Nation*, and a leading contributor to the *North American Review*. He has also lectured at the National Academy of Design.

Eugene Schuyler, amateur, now consul-general at Roumania, is best known as a diplomat and historian.

Among the women who were members was Mary L. Booth, the editress of *Harper's Bazaar* for many years.

Henry R. Newman, painter, has resided in Florence for ten years past.

It will be seen from what has been said that the American reformers never called themselves Pre-Raphaelites. They did not presume to do the work of the English reformers of art, or to assume their title. They preferred to be called only "Realists."

But, like their progenitors, they were the recipients of an equal share of misrepresentation and abuse. It was a comparatively easy matter for the American newspaper critics of the time to launch against these men and women the arrows of invective and second-hand wit which they had learned from the English critics. But they were often able to work up a prejudice on the part of those who made no effort to find out what the new movement was about. For instance, it was common to hear them say that the Pre-Raphaelites would paint the leaves of a tree a mile away and a fly on the top of a mountain, which it was manifest that they could not see, while on the contrary their aim was only to paint nature as they saw it, and, what was more important, to learn how to see it as it was and not as the conventionalists said it should be seen. Half the training of a young artist who previously has been taught to draw in the conventional manner, consists in overcoming the tendency to see in a conventional manner. When he has learned to see nature rightly and to draw just what he sees and nothing more, half the battle is won. I know it is difficult for one who has not tried it to understand this, and one reason is that we always look more intently at pictures than at nature, and pictures are too much accepted on faith alone. It is hard, I know, to make up one's mind that our friends, the painters, who devote their lives to making pictures make them falsely, and purposely so, even without knowing it. But unless we accept this truth and compare their work with similar natural phenomena we will never be able to know whether they are right or wrong. It is this amount of knowledge which is at least essential to the critic of works of art.

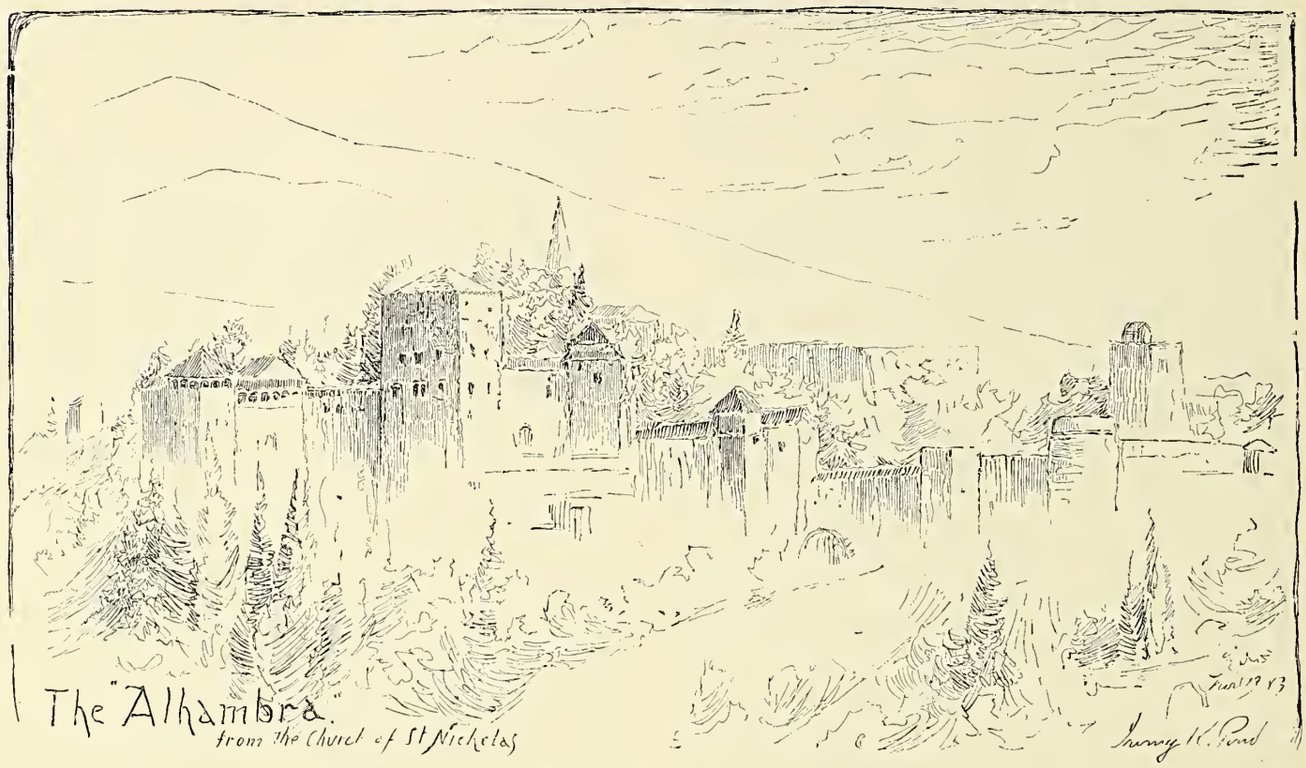
It will be seen that the artists above named were few in number, but they were not the only realists. There were many, twenty years ago, who were realists, but who were opposed both to criticism and association. Many are now well known and distinguished members of their profession. I may name one for illustration, William T. Richards, of Philadelphia. There are hundreds now. For, as a school of art, realism no longer exists, while as a *vital principle* it permeates every domain of art. There is an organization now in New York which bears some relation to it, the Society of American Artists. But this took shape rather as a protest against the narrow mindedness and old fogyism of the Academy than as an independent movement. It is to a great extent an outgrowth of the modern school of realists of Munich, and bears the same relation to it as did the Association for the Advancement of Truth in Art to the English Pre-Raphaelites. It is a natural sequence to the growth of realistic ideas throughout the world, but as a school of art it might better be called the "impressionist school" of realism. Its color is always right. Its drawing is always true when it chooses to be so; but it says "we dare be free from all convention, and we mean to show you that we do." A hand, a foot, a head or a tree trunk may be drawn true to nature, but the rest is a blot, the record of an impression, right in color but chaotic in all else. Such is the work of this healthy, vigorous, independent and enthusiastic society, a living protest against the dry bones of academic Rip Van Winkleism. And as a sign of the times this is the latest event in its history—the Academy has opened its doors and asked it in. The last exhibition was held in the Academy galleries.

In the domain of architecture and decoration the national societies of England and America, the Royal Institute of British Architects, and the American Institute of Architects, have done as little for the progress of æstheticism as have the corresponding associations of painters and sculptors. They have been at most only business organizations to look after the material welfare of their profession. They have stood between trades-unionism on the one side and the love of beauty on the other. It is not in the nature of such associations to reform the arts which they profess; as soon as they do they become divided into cliques and factions, and go to pieces with endless wranglings. Reform can only be effected by reformers, and reformers must be enthusiasts. It is the labors of such men only, who make this world to come a little nearer to paradise. What the world needs is the refining influence of art, seen not only in our picture galleries, accessible to a few only, but in all the affairs of our daily life. It is that art which brings with it every refinement of life, which lifts us from drudgery and toil, from all selfish desires, all sordid ambitions, and surrounds us with those things which are true and beautiful; which gives us a true insight of nature; which, as has been so often said, lifts us up from nature to nature's God.

For,

> "Nature never did betray
> The heart that loved her; 'tis her privilege,
> Through all the years of this our life, to lead
> From joy to joy; for she can so inform
> The mind that is within us, so impress
> With quietness and beauty, and so feed
> With lofty thoughts, that neither evil tongues,
> Rash judgments, nor the sneers of selfish men,
> Nor greetings where no kindness is, nor all
> The dreary intercourse of daily life,
> Shall e'er prevail against us, or disturb
> Our cheerful faith, that all which we behold
> Is full of blessings."

THE Royal Insurance building is to be illuminated by 1,200 electric lights placed by the United States Electric Light Company. The arc and incandescent systems of this company are being largely used by the government. The St. Louis and Chicago postoffices are being equipped with 1,000 lights each by this system which includes all the machinery, dynamos, etc., that are used in connection with the lights. The enterprise of the far West is noticed in the adoption of this system of electric lighting for the Montezuma Hotel at Las Vegas, New Mexico.



European Sketches.

BY IRVING K. POND.

PART I—THE ALHAMBRA.

THE ALHAMBRA stands on the top of a high steep hill which projects into the plain of Granada, and towers its massive, brilliant walls far above the lofty poplar and cypress trees, which have sent up their tops higher than is customary even with them, as if to glean, through personal observation, some idea of the beautiful, mysterious interior. Built, as it was, to serve as the fortified residence of the Moorish kings, the Alhambra offers, on the face it presents to the outer world, little or no suggestion of the beauty of its courts, halls and chambers.

From the city of Granada, which its battlements command, and from the sunny plain, from which it is a conspicuous object for many a mile, this great pile of red brick is, to all appearances, simply an immense fortress, striking in the boldness and picturesqueness of its masses and its color.



It is only when one has climbed over house-top and through alley, among ancient Moorish ruins and around quite as ancient Christian relics, and has gained the square in front of St. Nicholas, a church on the hill directly opposite, across the valley of the Darro, or has striven up the deep and tortuous ravine to the table-land in the rear of the fortress, that one's eye is gratified by the sight of green trees, white-washed towers and red tile roofs, peering above the inclosing walls and battlements, giving an air of peacefulness and domesticity, yet little suggesting the wealth of beauty and poetry within. From these standpoints are visible charming details of deep-seated windows and green blinds, of shady balconies and long, cool arcaded passages between various apartments, touching the massive pile with a soft gleam of romance. The romantic gleam is in nowise dispelled as one winds up the pathway under tall, graceful elms, through the dark green foliage of which dart rays of vermilion and ocher, of purple and gold, reflected from the brick, stone and stucco of the old walls. Suddenly, across the path looms up the great Tower of Justice, the principal gateway into the fortress. Here, under this great horseshoe arch, is, if ever there was, enchanted ground, for deep in the bowels of the earth are imprisoned the avaricious governor and his aides, who went down to fetch away the enchanted gold and jewels. The light of the taper (a magic taper, of course,) was



unfortunately extinguished, and the earth, which had been cleft to admit them, closed above them, and there they are, waiting for the great tower, which stands an everlasting monument over them, to fall, when they will be delivered up to daylight. The poor souls had better die and have done with it, for a legend says, that until "the hand reaches down and grasps the key" the tower will stand. One would think there was a chance of the monument standing through all eternity, for the "hand" is cut on the keystone of the large outer arch, and reaches upward and outward, while the "key" is graven on the keystone of a smaller inner arch, many feet below and behind the hand. (According to an old Moorish legend, the fortress would never be opened to the Christians till the hand grasped the key, but history having disproved this, we fall back on the "legend" just related as the true one in connection with the tower.)

Passing under the archway, one enters the courtyard and gardens, seeing on all sides quaint bits of early Moorish work; arch and walls decorated with red brick and glazed tile. Round about are the huge towers, from the summits of which one of the finest of earthly views is opened up to the vision. In front, sweeping down out of the valley into the plain, is Granada, the city of the Moorish kings, once with a population of eight hundred thousand souls, today a mere shadow of its former self, yet still magnificent and sparkling with its scores of shining turrets, domes and minarets. Miles across the level plain—that beautiful garden, which has run with the juice of the grape and the blood of many a brave Moorish and Christian knight—rise the mountains, which climb in bolder and bolder steps to the perpetual snow fields of the Sierra Nevada. Truly, a more magnificent site for the most beautiful of palaces could not have been found. To the right, in the face of the hill which rises above the more ancient portions of the city, are hewn the caves and dwellings of the gypsies, which ring, day and night, with the music of guitar and mandolin. Just beyond, across the deep ravine, is the Generalife, the pleasure of those pleasure-loving kings, nestled like the home of a bird among the tall poplars on the steep hillside, the very picture of airy, joyous contentment. The Generalife, in the same style as is the Alhambra, has much more the appearance of a human habitation, and its courts rival in beauty those of the Alhambra itself. In the main courtyard, and almost blocking the passage to the Moorish palace, stands a fine, though unfinished renaissance structure, started by Charles V for a royal residence. Its sculptured decorations and bass-reliefs contrast wonderfully with the Moorish work, from which imitation of natural forms in painting or in sculpture was religiously excluded.

Through the partly opened door near by, we catch a gleam of white marble columns, and note the intricate stucco work and the brilliant tiles of floor and wall. We enter, half expecting to be challenged by a Moorish guard, armed with keen-edged cimeter and long-barreled rifle. We encounter no one, see no retreating forms of veiled beauties hurrying away out of the range of vision of intruding eyes. No life presents itself, for the old Moorish life has gone out and has left naught but the cold, beautiful corpse, though perfect and lovely still. Around the court we have now entered runs an arcade, while the open court is almost entirely taken up by a fish pond, along the sides of which run rows of neatly trimmed myrtle. At the far end, and over the Hall of the Ambassadors, rises the great tower of Comarès. This lofty pile, with its gorgeous coloring and the clear blue sky above, is perfectly mirrored on the cool green surface of the pool, the whole breathing out so profound a sentiment of celestial rest, that the weary traveler, who well knows the impossibility of reaching heaven at a single bound, is tempted to essay an entrance by a single dive. From this court (de la Alberca) we enter the Hall of the Ambassadors. The view from the windows of this room is quite comprehensive. On one side a picturesque, foreshortened view of the fortifications, and on the other the peaceful Generalife; on one side the plain of battle, and on the other the mountain of pleasure. A narrow passage leads from the Alberca to the Court of the Lions, named from the fountain at its



center, the basin of which is supported on the backs of twelve stone creatures, intended, it is said, to represent lions. There is a sort of suggestion about those beasts unlike unto anything in heaven above or in the earth beneath, which gives us a hint of how far the Moors might have carried on their art had not their religion interfered.

Art in Architecture.

BY "T. SQUARE."

THERE is perhaps no quality more conspicuous by its absence, than the actual practice of art by the architectural profession; and the natural question arises, why may not the architect be the artist? The history of early architects shows them to have been adepts in sculpture, painting, music, etc., and Angelo declared it took the nine arts to make an architect, loving painting the best, personally, but revering the master genius of an architect as one who created and painting but a means of perpetuating the results.

The question is not one to be cast carelessly aside, for it merits a careful consideration; and as a matter of importance to the younger of the profession, whose education as a rule is about as far removed from studio work as it is possible to conceive, needs answering.

At no time in the history of the art more than now has the assistant been regarded as a machine for the use of the square and compasses, and his work become so purely mechanical. The term draughtsman or clerk being usually applied to him, and, as the name implies, is found to be a user of instruments, to measure and to mark. If he uses his instruments cleverly he seems to reach the summit of professional skill required of him; and with this, should he possess an uncertain knowledge of customs and styles in building, you have before you the complete article, the so-called "architect." It being considered useless for the "article" to know anything of the grand old five orders; and in some instances where the beginner made a start in a carpenter shop it adds to the grandeur of his capabilities, admitting of a little more conceit, and his look of disdain upon his "unpractical" comrades shows how much ignorance can be crammed in with a little knowledge.

As a rule, office work partakes of drawing the mechanical results of carpentry, and so lowered has become all idea of art in many minds—that should a design not show this kind of detail, or in other words, be drawn to represent an idealism, it would be ridiculed and buffetted by every "wood-butcher" that sees it, and the designer is excused as being a little green yet. So the ideal of artistic conception becomes at once subservient to the caprice of mechanics, and it is no wonder that the art has become debased to mechanical effects. How many there are who wish that the designers might rise above this level, yet hesitate to become the one who will try, because of the fear of opposition and the criticism of the builder, whose opinions are asked for by his client; and so far has the general feeling of the necessity of mechanical result obtained with the general public, that the study and experience in design of an architect too often depend upon the opinion of a mechanic for its acceptance. This state of feeling has helped to degrade the business, and the artist to be preferred must have the reputation of mechanical skill paramount. But now let us peep into an artist's studio, though the artist may not be educated in mechanics, and quite up to the standard of academic rules, but his work teaches the lesson we would know. He apparently is ignorant of square and bow pen, but with free hand and graceful movement of pencil his conception takes form and rises from the mass of surroundings, an element of it, a grand feature of the picture, proportioned and harmonized in every part. The fancy has every opportunity to play and his liberty of execution is to be envied. You say it is but a painting. Yes, so it is, but ask its price, and it will buy the house, furniture and surroundings. Yet it is only a picture. But it pleases, and why? Because it is an ideal, a true representation of where the mind would search for comfort and happiness, suggesting every pleasure and its realization. There is something sublime in the power of the hand that forms the design and its accessories, in the sketches and views that delineate the results guided by the mind that understands to combine the ideal forms that they show, the happy combination of adaptation to position, to the purpose of its construction, and with that its manner of construction so formed, proportioned and decorated as to be a succession of pleasing effects which will continually attract and be a source of pleasure to its owner; a reality produced from an ideal picture.

Under our present systems of practice, do we produce these results? It is useless to blind ourselves to the distinction between these two pictures of practice, and as useless to deny the results. Under the first system we produce mechanical effects, correct in detail and shapes, but still showing of the workshop, whereas under the other system we have architectural pictures which in skilled hands will charm the eye, be a source of enjoyment and not a record of absurdity called æsthetic, etc., names which are now but a synonym for some ludicrous blundering.

No architect can depend upon his instruments for a conception or the realization of a conception, the effects must be lost in the mechanical results. Why should not all the original studies be free hand sketches worked up carefully in perspective, idealized first in form and next in decoration; from this make all working plans which show the construction and detail, keeping in view at all times the great principles of true design, learned from every grammar of the art; not as now, we first see details, then construction to work them in, and parts of buildings copied and re-copied as though done by rote, and finally a color drawing showing effects, which too often do not exist in the building but show what the parts ought to have been.

Too many of the profession cannot commence this work on these principles because it must be inborn and inbred, and their practice prohibits change. Others will see its benefit but fail to follow, because it is a little too much to ask of them to learn new lessons. But there is a growing generation who can and should be taught and advised aright; they can learn it readily, and if they are utilized it must be to mutual advantage and profit. The thought of present gain must be laid aside for the greater future reward.

Students should weigh this matter carefully, and raise themselves above the menial labor of copyists; prove the talents within them, and seek from its sources the true light of knowledge in architecture.

Advising in a former letter the forming of sketching clubs, I am pleased to know it has met with good results, and there are those ready to work in it as soon as the plan of operation is perfected.

Our Illustrations.

Perspective, plans and details of a residence for L. A. Hagars, Esq., at Elmhurst, Ill., by Fiedler & Penner, architects, Chicago. The building covers 40 by 50 feet. The basement is constructed of common rubble stone, the first story is of brick, the second story frame. The cost will be about $7,000.

Perspective and plans of a residence for S. B. Gardner, of Clinton, Iowa, by Edbrooke & Burnham, Chicago. The building is 44 by 71 feet. The basement is of brown stone, the walls of pressed brick with brown stone trimmings, with slate roof. The windows are plate glass, the interior finish hardwood; heated by steam, and will cost abont $25,000.

Store building for A. F. Troescher, by Architects Adler & Sullivan. The building is seven stories in height, seventy-nine feet front and ninety feet deep. The front is built of McArthur brown stone for the first story, and above this Chicago Anderson pressed brick, terra cotta, iron, and plate glass. The columns are iron, the plastering upon wire cloth. The interior finish is red oak with maple floors. This work, as well as the entire carpentry of the building, is placed by M. B. Bushnell, whose work as a constructor of auditoriums, and other expert construction, has given him a reputation for accuracy and quickness second to none in the West. There is one steam freight and one steam passenger elevator. The arrangement is for a wholesale store, and the cost when completed will be $100,000.

Building for the Union League Club of Chicago, by Architect W. L. B. Jenney. The perspective is drawn by W. B. Mundie, formerly of Hamilton, Ontario, an architect, since a year ago permanently connected with Mr. Jenney's office. The building is situated on the south-west corner of Jackson street and Fourth avenue, opposite the Chicago custom house and postoffice, 70 feet on Jackson street and 100 feet on Fourth avenue, and it is designed for a brick and terra cotta construction, with tile roof somewhat resembling the Fourteenth Century Lombardic. The first story contains the great reception hall, the ladies entrance with its special waiting room and elevator, the grand staircase, the principal elevator, the gents toilet and coat-rooms, etc. The second story is devoted to the library, the billiard room and the café. The third floor consists entirely of lodging rooms for club members. The fourth floor contains the ladies dining room and seven private dining rooms of various sizes. The fifth floor contains the grand dining room, the kitchen and pantries; in the rear (south) there are two other stories containing the servants apartments and kitchen. The special features of the building are: a private entrance for ladies with waiting room, reception room, a special elevator and a moderate sized public dining room, all especially devoted to their convenience and enjoyment; the large reception hall on the first story with its enormous fire-place, a newspaper and lounging room occupying the entire front on Jackson street, and the great dining room occupying most of the fifth story. The roof is open timber. In the dining room, the tower is covered with a dome of colored glass, commencing just under the upper windows, giving a unique and magnificent effect to this part of the room. It is proposed to finish this building the coming year. The foundations are already in place. The interior decorations will be all the means at hand will allow. It is proposed to expend about $150,000 on the structure.

Mosaics.

THERE is said to be a firm of female architects in London that does a flourishing business. They manage to put several closets in each room.

THE Ohio Encaustic Tile Company have placed their excellent product of plain, glazed and encaustic tile in the hands of Abbott & Wright for representation in Chicago. The superiority of Ohio clays for things ceramic is noticeable in the samples.

THE Boston Terra Cotta Co., 394 Federal street, Boston, Mass., write that the recent fire at their works was confined to the three upper floors of their new building. Their original factory, kiln and machinery are intact, and all contracts old and new will be promptly fulfilled.

MESSRS. HEALY & MILLET are furnishing some very creditable stained glass work for the new Western Indiana Depot. The transoms of all the windows are stained glass, that for the main entrance being especially fine, representing a locomotive under a full head of steam.

MR. BRUNKHORST, of the Northwestern Terra Cotta Company, has gone to New Orleans to visit the exposition and attend to the erection of their exhibit. This will compose one of the largest and finest collections of terra cotta work ever displayed in this country. Among other works of art is a statue in terra cotta 35 feet in height.

THE laying of the corner stone of the Marshall county, Iowa, court-house at Marshalltown, occurred on the 25 ult., under the auspices of the Grand Lodge of the state of Iowa. An elaborate programme was carried out, and at the laying of the stone the working tools were appropriately presented by the architect of the court-house, J. C. Cochrane, of Chicago.

THE board of trade main hall is to be lighted by four 150 light sun-burners placed by A. C. Hickey, of Chicago. The general use of this light in opera houses and halls has made it popular. The Harmonica Hall at Minneapolis, of which C. F. Struck is the architect, has been lately fitted with this light, and it has gained in favor and use in many eastern cities as well as those of the west.

SOME of the heaviest columns and lintels in any building in the Northwest were placed by Vierling, McDowell & Co. in the West Hotel, Minneapolis, and the perfect work produced is evidence of the capacity of this firm to furnish the most massive iron work required. This firm have just completed a large contract at Indianapolis, Ind., and the cast iron work of Sibley's warehouse at Chicago.

THERE has been upon exhibition at the Permanent Exhibit and examined with great interest by many architects, a roofing paper which seems absolutely water and weather proof. Not a few who have seen and examined it have desired to purchase a quantity for immediate use, but were unable to do so as the material is made in England by the Willesden Company of London. The construction of buildings is so rapid, and the habit of preparing plans for immediate use so universal that the material is quite beyond the reach of builders unless a depot is established here for its sale. The agent of the company, Mr. Hawkes, has, it is understood, gone to England to return again in the spring. While the material seems in quality and adaptability to be far superior to any similar product of American manufacture, it will be of little use to try to introduce it until it can be procured in any reasonable quantity at a day's notice.

WE clip the following from a Cincinnati exchange: We learn that Mr. George E. Light, of the Cincinnati Steam Heating Company, returned from Madison, Indiana, yesterday, and that while there he closed a contract for erecting the steam heating and automatic sprinkling apparatus in the new and extensive factories of the Eagle Cotton Mill Co. Mr. Light was awarded the contract on his bid, which was near $1,500 in excess of some other bids submitted, which speaks well for his company, and shows that contractors with a reputation for doing only first-class work get the preference when bidding against cheap John contractors. The Cincinnati Steam Heating Company have furnished their apparatus to the following buildings within a short time past: A large college at New Orleans; First National Bank, Nashville, Tenn.; Capt. J. P. Drouillard's residence, Nashville, Tenn.; Capt. C. G. Perkins' residence, Henderson, Ky.; Trinity M. E. church, Evansville, Ind.; Herman Junge's residence, Cleveland, O.; Euclid avenue Baptist church, Cleveland, O.; Mrs. F. E. Leslie's residence, Oberlin, O.; W. S. Hume's residence, Silver Creek, Ky.; McLean & Anderson's building, Greenfield, O.; Mrs. J. B. Gibson's residence, Mt. Auburn, O.; J. M. Brunswick's greenhouse, Walnut Hills, O.; Seth Evans' greenhouse, Clifton, O.; College of Music, city, and have just been awarded contract for putting in the steam heating apparatus into S. R. Everett's new granite residence on Euclid avenue, Cleveland, O. (Mr. Everett is president of Cleveland Rolling Mill Co.); also Geo. W. Stockley's elegant new Amherst stone residence, Euclid avenue, Cleveland, O. (Mr. Stockley is president of Brush Electric Co., of Cleveland); also the Leland University, New Orleans, La., and various local and foreign contracts in great number. If anybody hereabouts is enjoying a genuine "boom" in trade, it is the Cincinnati Steam Heating Company.

AMONG the many great improvements, one of the most important, and which every resident and visitor cannot fail to notice, is the enormous growth of high buildings in our large cities. More especially in New York and Chicago, where we have very handsome office buildings and palatial apartment houses of tremendous height, towering up like Egyptian monuments and of quite colossal proportions. We stop a moment to inquire why we came to erect these lofty buildings. The rapid increase in the value of land in our large cities is no doubt one very good reason. But the chief incentive to the erection of tall buildings is the perfection arrived at in the manufacture of passenger elevators, by which we can readily ascend to the top story of our loftiest buildings in a few seconds. Without the elevator it would be almost impractical for our merchants and others to attempt to do business or reside above the third or fourth story. The next in importance to a perfectly safe elevator is a reliable means of communication between the different floors and the attendant in the passenger car. We will pass the many different kinds of elevators, some of which are marvels of perfection and elegance, to describe a most useful invention which is already in use in the elevators in some of the finest buildings in the United States and Canada. Several different systems have been tried but with little success, on account of their easily getting out of order. The comparatively recent invention for pneumatic bell signaling in elevator cars was perfected and manufactured by the firm of C. E. Zimdar & Co., under the combined patents of C. E. Zimdar and J. Hunt, at 9 Laight street, New York. These bells are operated in a very simple manner. A pneumatic push or press button is fixed on every floor at the entrance to the elevator. This push button is similar in appearance but a little larger than the ordinary electric push button. A slight pressure on these pushes compresses the air contained in them, and rings a bell in the passenger car, at the same time indicating the name or number of the floor from which the call was made and where the elevator car is required. The connection between the different floors and the car is made by small metal tubes ⅛ inch in diameter and a patent flexible cable. Too much cannot be said in favor of a system which is thoroughly reliable for this purpose, and we feel we can confidently recommend the Zimdar patent pneumatic bell. The manufactory is at 9 Laight street, New York. The Chicago agency is L. S. Baldwin & Co., 75 E. Madison street. The Cincinnati agency is J. B. Schroder & Co., cor. Third and Elm street. The Philadelphia agency is Independent Electric Co., 1324 Chestnut street.

New Publications.

ILLUSTRATED CATALOGUE AND PRICE LIST of Copper Weather Vanes, Tower Ornaments, Finials, Church Crosses and Emblematic Signs, Etc. THOS. W. JONES, New York.

As specialists in weather vanes this house seems to take the lead. The catalogue shows a large variety of copper vanes, and as the title indicates a large amount of metal work in other lines beside. A full description and list of prices gives the purchaser an opportunity to select his style and know the cost in advance. The catalogue is neatly printed and should be preserved by architects.

ILLUSTRATED CATALOGUE of M. BENNER & Co., Iron Works, Chicago, Ill.

It is remarkable that in no line of publication is such vast and rapid improvement manifest as in the line of trade catalogues, and those firms in the building material manufacturing line seem in this to excel. This is probably due to the combining of the artistic and mechanical that renders such publications artistic expositions of mechanical productions. This fact has so prevailed that a handsome and well arranged catalogue is an evidence of a reliable and capable house. M. Benner & Company have published such a catalogue and are such a house. The catalogue is bound in cloth, is printed on pages, about 200 in number, chromatically lithographed, with the imprint of the firm. The contents include handsomely drawn and printed wood-cuts of every form of cast and wrought iron work. So exceptionally profuse in number, style and designs are they that we think that no immodesty can be charged to the firm when they say: "We have endeavored at a great expense to present the handsomest catalogue in our line of work in the country." Valuable tables for the use of architects and contractors are given supplementary to the subject matter. The head of the firm is the inventor of the Benner Fire Escape, which for practical utility has no equal. As chief of the Chicago fire department for many years Mr. Benner laid the foundation of, and raised the department to the position it now occupies as first in drill and equipment in the world. And it is to his practical knowledge of the requirements of the public in the prevention of, and escape from fire that the public owe the escapes made by this firm. Leaving the fire department with all the honor such success as it has met with could confer, Mr. Benner commenced to manufacture fire escapes only, but the business has so increased that he has combined with expert iron workers, and the company are now leading in the manufacture of all descriptions of wrought and cast iron work that enters into the construction or the surroundings of buildings. As architects prefer to furnish their own designs for columns, store fronts, etc., no cuts of this class of work are published, the modeling department being fully equipped to skillfully carry out the designs of the architect, while the firm can in turn furnish special designs for any class of work.

ILLUSTRATED CATALOGUE. Published by the Northwestern Terra Cotta Works, TRUE BRUNKHORST & Co., proprietors. Designs drawn by PAUL C. LAUTRUP. Chicago, 1884.

This is a picture book, and in this particular is the most comprehensive of any catalogue yet published in the West, in that it leaves the illustrations to tell the whole story without a line of print to detract from the illustrative force. The cover is a decorative example of cornice and panel work in terra cotta, appropriately printed on terra cotta colored paper. The legend of the firm is inscribed on it, and the word Northwestern is aptly illustrated by an artistically drawn winged female figure flying through space, surrounded by birds and bearing on her arm a terra cotta vase, while her hand points to the "Northwest" marked on a dialed circle which surrounds the figure; an ingenious piece of design in which the execution is as marked. The artist's skill is also most noticeable in a sketch upon the back of the cover, in which those who are familiar with the imposing form of Mr. Brunkhorst will recognize him giving directions to several workmen, though his back and upper part of his body only is seen. The plates are twenty-six in number, and display all departments of the art of terra cotta manipulation for architectural purposes, giving so complete an illustration of the wide range of this firm's work, their versatility of conception, that not only displays their ability to produce to its fullest extent, but suggests in a most forcible manner possibilities for effect by the intelligent architect that are practically unlimited. The gentlemen composing the firm are the pioneers of the terra cotta art in the West, and so well have they labored to raise it to its highest possibilities that they have no western competitors; and with a practical knowledge of the manipulation of plastic clay gained in Europe, and a corps of artists whose talents lie in this especial field, they have given to our largest and best buildings that ornamentation so long lacking, and that in combination with red brick adds so much to the scope of the architect's labor and the pleasing effect of external architecture. Nor do they stop here, for the illustrations of this work include designs for mantels and fire-places, and other interior ornamentation. The color is not confined to the rich reds commonly known as "terra cotta color," but a handsome buff is also made, as well as a number of other shades—the color of the material being at the will of the designer. A fine glaze is also a feature of this terra cotta, and the designs here illustrated are thus rendered permanent and substantial. Although this catalogue is one of the most costly it is but one of a series that will be published from time to time as the production of new designs seems to demand, and they are most valuable aids to the designing architect, enabling him to decide upon the ornamental features, and to order designs from the numbers in the catalogue, which will be sent to architects upon proper application.

Inventive Genius in Building.

307,093. Stone-Dressing Machine. Ethan R. Cheney, Chelsea, Mass.
307,109. Mode of fastening Metal-Roofing to Buildings. Henry Flynt, Kansas City, Mo.
307,121. Brick-Machine. John H. Konefes, Quincy, Ill.
307,173. Lining for Chimneys. Jeremiah Browell, San Francisco, Cal.
306,184. Composition-Mastic for Covering Roofs, Telegraph Wires and the like. Andrew Derrom, Patterson, N. J.
307,194. Combined Ventilator and Damper. Franklin R. Hodgeboom and George O. Woolcocks, Brooklyn, N. Y.
307,195. Floor-Clamp. Edward W. Holt, Corinna, Me.
307,202. Derrick. Patrick Kelly, Poughkeepsie, N. Y.
307,226. Deflector for Water-Closet Basins. John Reid, Yonkers, N. Y.
307,239. Elevator. Thomas Wm. Taylor, Worcester, Mass.
307,249. Means for rendering Buildings Fire-Proof. G. F. Wright, Palmer, Mass.
307,274. Chimney-Cowl. John S. Early, Prattsburg, N. Y.
307,327. Brick and Tile Kiln. Jas. W. and Raymond C. Henfield, Willoughby, O.
307,338. Window-Ventilator. William Scharnweber, Jefferson, Ill.
307,365. Drawing-Board. Rudolph Schmitz Werotte, Finborough Road, County of Middlesex, England.
307,384. Steam-Heating Apparatus. William W. Forrest, Philadelphia, Pa.
307,395. Ornamental Tile. Robert G. Jones, Washington, D. C.
307,437. Pneumatic Dispatch-Tube. Henry Clay, Philadelphia, Pa.
307,459. Refrigerator and Refrigerator-Building. Joseph F. Hanrahan, Ottawa, Ontario, Can.
307,471. Mixing-Machine for Asphalt, Concrete, etc. William H. H. Knight, Washington, D. C.
307,496. Radiator. Joseph W. Shaw, St. Louis, Mo.
307,499. Heating-Apparatus. Sidney Smith, Cambridge, Mass.
307,520. Water-Closet. William Bunting, Jr., Boston, Mass.
307,526. Ventilating-Attachment for Water-Closets. Minford S. Clark, Brooklyn, N. Y.
307,558. Street-Box for Gas and Water Service. Edward Lindsley and Chas. E Lindsley, Cleveland, O.
307,586. Bedding-Strip for Stone-Masonry, etc. George R. Phillips, Providence, R. I.
307,590. Sheet-Metal Roofing-Plate. Patrick H. Regan, Nashville, Tenn.
307,668. Water-Closet. Wm. H. McAndrews, Bradford, Pa.
307,688. Self-Closing Hatchway. Richard D. Thackston, St, Louis, Mo.
307,787. Combination Try and Bevel Square. Horace W. Merrill, Lynn, Mass.
307,794. Portable Ventilator. Theodore C. Perry, Chicago, Ill.
307,852. Range-Boiler. Henry P. Folsom, Brooklyn, N. Y.
307,865. Machine for Rabbeting, Grooving or Moulding Stone. Alexander McDonald, Cambridge, Mass.
307,893. Metallic Lath. John W. Wissinger, San Francisco, Cal.
307,907. Hot-Air Furnace. Nathaniel A. Boynton, New York, N. Y.
307,951. Automatic Siphon. James P. Hyde, New York, N. Y.
307,980. Freight-Elevator. Charles B. Paxton, Vicksburg. Miss.

The time for receiving applications from Americans for space in the International Inventors' Exhibition, to be held in London next May, has been extended to January 31.

Synopsis of Building News.

Anoka, Minn.— Much has been done here since the great fire last August, in the way of fine two-story buildings, and preparations are being made for corsiderable work in the spring.

Architect T. D. Allen, formerly of Marshalltown, Ia., recently located here, reports: For Mrs. Mary R. Gage, store building, 25 by 100 feet, cost $5,000; basement completed. For H. L. Fickner, store building, 44 by 66 feet, cost $5,500; projected; to be built in the early spring. For Pease & Daniels, double store building, 40 by 60 feet, cost $5,000; basement completed. For H. L. Ticknor, store building, 24 by 100 feet, cost $6,000. Work on all the above has been suspended on account of cold weather, but will be recommenced in the spring.

Appleton, Wis.— Mr. Henry Hewitt, Jr., will erect a residence, to cost about $18,000, early next spring.

Mr. Kloepfel will erect a handsome store building on the avenue soon.

Mr. Thomas Patton has just completed a new flouring-mill, three stories high, with capacity of one hundred barrels per day, cost of building $12,000.

Mr. Cabel Shearer has secured plans for an elegant residence, which he intends building early in the spring.

Anniston, Ala.— Architect John Moser reports the following as the progress of a town which had but one store just one year ago: For S. Adams, two-story brick, 30 by 60 feet, cost $4,000. For Bank of Anniston and Mr. Ware, two-story brick, store and bank building, 50 by 90 feet, cost $10,500. For Dr. Wikle, two-story brick store and office building, 26 by 80 feet, cost $3,800. For Lator, Johnson & Co., two-story brick store building, 30 by 100 feet, cost $5,660. For Geo. A. Noble, two-story frame dwelling, six rooms, cost $3,800. Gardner's lodge, one-and-one-half-story frame, cost $2,600. Also an elegant stone and brick residence, eight rooms, cost $25,000. Railroad depot at Srona, Ala., 30 by 50 feet, cost $2,500. "Mobile" Block, brick, with stone trimmings, 120 by 75 feet, cost $20,000. "Tyson" Building, two stories, brick and stone, 30 by 75 feet, cost $3,500. "McIntire" Building, one-story brick and stone, 30 by 60 feet, cost $3,800. For A. & A. R. R., two-story, fourteen rooms, double frame house, cost $4,000.

Architect Chas. M. Noble of Philadelphia, Pa., built sixty-seven three-room houses, at a cost of $800 each. Two two-story brick houses, cost $12,000. Two frame dwellings, cost $7,000.

Architect Pierson, of Philadelphia, "The Anniston Sun" building, cost $125,000.

Architect John Noble, Noble & Taylor Opera House, cost $25,000.

The Anniston Land and Improvement Co. propose building a $50,000 building.

G. P. R. R. repair shops, 150 by 400 feet, and locomotive works, to cost $200,000, are projected. Also two school-houses to cost $16,000. A Presbyterian and a Baptist church, at cost of about $10,000 each.

Bloomington, Ind.— Architect J. L. Nichols reports: A number of small cottages, aggregating about $18,000. Has almost completed the college buildings and the Christian church, at a cost of $98,000. No new work expected until spring.

Chicago, Ill.—The building season has not closed, as the most remarkable weather known to this locality for years has continued to within the past five days, and buildings have been got under roof that ordinarily would have stood open all winter or finished under the usual difficulties of inclement weather. Though few buildings will be started till after January, the offices are reasonably busy, and in some an unusual activity prevails. Only one large office is reported to have decreased its force to any extent, and that only temporarily. The outlook for spring business is even better than at this time last year. The estimate upon buildings erected and material consumed will be carefully prepared for publication next month. Among many remarkable examples of fast work is the erection of the opera house and office building by Architects Cobb & Frost. Clark & Fuller are the general contractors, and their work did not commence till after the building which previously occupied the ground was removed. This work commenced about May 1st, and the party who contracted for the removal, through receiving a bonus from tenants and for other reasons, delayed the work, so that construction was not fairly commenced till August. The walls of the ten stories have been completed, and the roof will be on in a few days. Other buildings, notably the North-Western Loan and Trust Company's building, have competed with this, with very little odds in the race. While fast building shows skill and energy, it is questionable if it conduces to the stability of the structure. Contrary to this we find the foundations of the Marshall Field building laid and covered over, work to be continued in the spring.

The laying of underground cables for electric lights and telegraph has become quite general on the streets not paved with granite blocks, and a company are at present laying iron tubes for the reception of telephone wires. The ignorant, or at least discourteous, man in charge of the work admitted that it was a new experiment in telephone service, but it is hoped that the experiment will succeed, and that another year will see our streets freed from the unsightly poles and network of wires to which attention has been called so repeatedly by us.

The tower of the new Western Indiana Depot is about completed. The large clock is now being placed in position, the nine-foot dial forming quite a feature as it is seen at the head of Dearborn street.

The reconstruction of the Third Presbyterian church, recently destroyed by fire, is progressing rapidly. Architect Jenney is adding many new bits of embellishment and ornamentation to the gables, and will improve the church design as much as is possible.

We are frequently asked for an opinion in regard to the building outlook for next year. It is hard to guess, and harder still to make any estimate upon the matter, though the outlook seems hopeful enough, much more so, for many reasons, than at this time a year ago in regard to last season's building, which was beyond the expectations of everybody. There will not be as many large office structures built, and the building of flats will be less, but the building of stores and the improvement of down-town property will be large, and also the building of residences at a moderate cost will be largely increased. The continuance of good building weather has done much to stimulate trade, and there will be little opportunity for stagnation before the spring building season opens.

Architects Treat & Foltz report: For Mr. James F. Harvey, at 2951 Michigan avenue, three-story and basement brick building, 82 by 26 feet, with a portion 30 feet wide. The building will be English Gothic in style, with gablefront and corner Oriel in second story. The front is to be of Anderson pressed brick with brown stone trimmings: cost $18,000; under way.

Architects Adler & Sullivan have completed plans for the Lakeside Club House, to he erected at the southeast corner of Thirty-first street and Forest avenue. It will be one of the most handsome yet erected. The lot is 125x103, which will be covered by a seven-story apartment house and the club house, which will he on Thirty-first street and the entrance to the club house on Forest avenue. The first floor of the club house will be fitted as a store and above this will be the apartments of the club. The building will be constructed of pressed brick, brown stone and terra cotta, and will cost, when completed, about $75,000. This firm also report a residence for L. Schessinger, on Michigan avenue, 30 feet front, two stories and basement, in light, pressed brick and brown stone, to cost $20,000. Also a factory building, on Washington and Desplaines streets, for J. W. Scoville, 72 by 150 5eet, five stories, pressed brick, and mill construction, to cost $50,000. The contracts for the Ryerson building have been let, the foundations are in, and work is being got out to be pushed next spring.

Architect M. L. Beers has prepared plans for six two-story dwellings for Joseph Downey, the well known mason contractor, to be located at Adams and Honore streets. The cost will be about $30,000.

The New England Insurance Company are about to improve their property on Van Buren street. Architects Cobb & Frost have prepared plans for a five-story store building, to occupy numbers 18 to 26. It will be of pressed brick, iron construction, 90 by 90 feet, and will cost $55,000.

Architect A. M. F. Colton reports having completed plans and let contracts for Mrs. C. H. McCormick's building, corner Jackson and Market streets, retaining in the plans the general outlines of plans furnished for same by Architects Burnham & Root. The work has been let to: E. Earnshaw, mason work; Boldenweck & Heldmaier, cut stone; Northwestern Terra Cotta Company, the terra cotta work; Vierling & McDowell, iron work; Thos. Morse, carpenter work; Lemont Stone Co., sidewalks; I. G. McCarthy, painting and glazing. The stone used is the Vert Island. The pressed brick is from the Anderson Pressed Brick Company. He has also let the interior decoration of Mr. Chas. K. Miller's house to Messrs. Healy & Millet. This report, which is sent as above, requires some explanation. In our October number the building is reported by Mr. Colton with no reference to Messrs. Burnham & Root. Our attention being called to the fact by that firm both parties were seen. Mr. Root stated that they had been engaged by the McCormick estate to make design and working drawings for the building with the understanding that Mr. Colton, who had been architect and superintendent of the estate for many years, should superintend the work, Burnham & Root stipulating that any alterations of design, etc., should be done with their consent. Mr. Root showed elevations and working drawings and explained that one story had been taken from the building and the facade changed to correspond, with their consent. A letter from C. H. McCormick to Burnham & Root was seen (which referred to the mention in our October issue) substantially to the effect that Mr. Colton had intended no misrepresentation nor wished to claim authorship tot he "excellent design and plans furnished by you," etc., all of which proves that the plans were drawn and furnished by Burnham & Root. Mr. Colton on being seen showed the working drawings and pointed out where he had changed some of the details but preserved the exterior design. He stated that he had rewritten the specifications to suit himself, altered the foundations, etc., in each case, and in every alteration from the original plans upon the order of the owners. We take space to tell the facts, which speak for themselves, but would use the circumstance to show how necessary it is that architects should furnish reliable information, as it places us in an embarrassing position, and leads us to look with suspicion upon an architect who forgets to give credit to others when such credit is due, though in this case we believe it to have been thoroughly unintentional on the part of Mr. Colton to claim the designing of the building, the alterations in the plans being the basis of his claim as architect. The using of the word "completed" is misleading, and it is certainly wrong to call the original plans "outlines," no matter what alterations may have been made afterwards.

Architect Theo. Karls reports: For Mr. F. W. Elich, Fullerton avenue, near Orchard street, two-story and cellar and attic, pressed brick residence, 30 by 60 feet, cost $8,000; under roof. For Mr. H. Piper, 202 Burling street, three-story and cellar apartment house, pressed brick front, 24 by 68 feet, cost $9,000; under way. For Mr. Wm. Hammermiller, 434 LaSalle avenue, two-story and cellar, attic and mansard, pressed brick residence, 29 by 65 feet, cost $11,000; under way. For Mr. C. Kahler, Ogden avenue, near Polk street, three story and basement stores and flats, pressed brick front, 24 by 67 feet, cost $10,000; projected. For Messrs. Tarrant & Ramsey, East Indiana street, foundry and machine shop, 50 by 100 feet, cost $5,000; under way. For Mr. Aug. Schwarz, 202 and 204 Illinois street, two apartment houses, three-story and cellar, pressed brick fronts, 39 by 57 feet, cost $12,000; under roof.

Architect F. R. Schock reports: For Maud W. Morey, 394 Warren avenue, two-story and basement dwelling, 21 by 42 feet, cost $4,000; under way. For Wm. A. Giles, addition of fifth and sixth stories to Purington block, 80 by 160 feet, cost $15,000; under way. For E. Murrenner, two-story and cellar brown-stone front residence, 25 by 61 feet, interior all finished in hardwood, cost $9,000; under way. For S. R. Moore, two-story and cellar residence, 25 by 58 feet, pressed brick front and brown-stone trimmings, cost $6,000; under way.

Architect J. J. Flanders reports the following: The Haven School, on Wabash avenue and Fifteenth street, is up to the third story and will be under roof in a short time. The school on Lincoln and Division streets, named after Hans Christian Andersen, is up to the first story joists and will be continued through the winter. The Garfield School, on Wright and Johnson streets, is in the same stage of progress. Plans are nearly completed for a twelve-room building to be erected on the Burr school lot, and bids will be taken in a few days. This will be heated by steam, and provision will be made at some time in the future for supplying the old building on the same lot with steam from the boilers of the new building. Plans are being prepared for a six-room addition to the King School, with a system of steam heating for the whole building. Sketches for a nine-room building are also under way.

An architect who fails to give his name reports: For John O'Brien, 205 East Illinois street, three-story and cellar residence, 25 by 70 feet, cost $7,000; under way. For Frank Stoerk, Ashland avenue, residence 24 by 60 feet, cost $5,000; under way. For Wm. Woerle, Dayton street, residence 22 by 65 feet, cost $4,500; projected. For Andrew Joicks, 517 to 521 Dearborn avenue, three three-story and cellar houses, 20 by 70 feet, cost $40,000; under way. For C. P. Swigart, three-story store building, 24 by 65 feet, on Lake, near Leavitt street, cost $7,000; projected. For Alex. Moody, Washington and Leavitt streets, two-story barn, 24 by 42 feet, cost $3,000; under way.

Detroit, Mich.—Building is practically done for the season. Architect Henry Englebert reports: For Schmitt & Schmittdiel, six two-story brick dwellings, each 22 by 35 feet, cost $14,000; under way; Spitzley Bros. & John Finn, builders. For J. B. Nichols, two-story frame store and dwelling, 46 by 64 feet, cost $3,500; under way; J. McPhee, builder. For B. C. Cart, two three-story brick stores, 40 by 60 feet, cost $9,500; projected.

The plans for the new St. Joachim's French Catholic Church, to be erected on the southwest corner of Fort and Dubois streets, are nearly completed. The edifice will be built of brick, and it is estimated will cost from $50,000 to $60,000. Work on the structure will be begun shortly. Among the building permits issued recently are the following: Fairbairn & Henderson, a brick addition to the store at No. 132 Grand River avenue, $4,000; Edwin Wadey, three frame two-story cottages, Labrosse street, $3,000; Lane & Deitz, five-story brick building for C. H. Buhl, 62 by 80 feet, Nos. 55, 57 and 59 East Woodbridge street, $13,000.

Dubuque, Ia.—Architect F. D. Hyde reports: For Bassett, Huntling & Co., at McGregor, Ia., two-story pressed brick office building, with terra cotta fronts, 50 by 50 feet, cost $6,000; under way For W. D. Burnham, at Charles City, Ia., two-story frame cottage, cost $3,000; under way.

Dallas, Tex.—Architect J. E. Flanders reports: Stone court-house for Baylor county, Tex., 75 by 90 feet, three stories high, cost $45,000; contract let. For Baptist Society, Dallas, Tex., stone church building, cost $60,000; contract not let. For Mrs. Robt. Cockrell, frame residence, cost $35,000; contract let.

Elkhart, Ind.— Architects N. Weaver & Son report: For J. L. Wolf, two-story frame residence, cost $4,000; under way. For Chas. T. Greene, two-story brick residence, cost $3,000; projected. For Otis D. Thompson, two-story frame residence, cost $3,500; projected. For Peich Bros., one-and-one-half-story frame cottage, cost $1,500; under way; L. M. Smally, builder. For Ed. M. Bullock, two-story frame dwelling, cost $2,500; under way.

Frankfort, Ind.— Architect John W. Hammond reports: For Mr. J. H. Coutler, a modern two-story frame dwelling, cost $7,000; nearly completed; A. A. Bayless, builder. For Mr. Wm. Garrett a two-story frame dwelling, cost $3,000; completed; Liesure & Son, builders. For Mr. Gates, one-and-one-half-story frame cottage, cost $1,500; U. M. Palmer, builder.

Fort Wayne, Ind.— Architect H. W. Matson (late with D. W. Gibbs & Co., Toledo, O.) reports: For W. H. Isom, at Toledo, frame dwelling, 28 by 38 feet, cost $4,500; J. B. Hassett, builder. For Frank P. Connell, Toledo, frame dwelling, 26 by 32 feet, cost $3,700; John Griner, builder. For A. E. Macomber, block of cottages, each 24 by 30 feet, each cost $1,200. For Thomas Jackson, Fort Wayne, frame dwelling, 32 by 47 feet, cost $3,500; projected.

Architect B. S. Tolan reports: Court-house (Delaware Co.), at Munice, Ind., stone and iron construction, fire-proof, 120 by 196 feet, cost $200,000; Charles Pearce, of Indianapolis, builder. Daviess Co., Jail and Sheriffs, at Washington, Ind., 50 by 70 feet, cost $30,000; James G. Miller, builder.

Goshen, Ind.— Architect J. N. Jones reports: For Whittaker Bros., two-story and basement brick veneer building, 22 by 74 feet, cost $3,500; under way; Amos Schrock, builder.

North Springfield, Mo.— Work is practically stopped until spring. The high price of brick was the cause of impeding the progress of some work which would otherwise have been completed this fall. Outlook for spring is good.

Architect A. P. Wright reports: For S. W. Baptist College, at Bolivar, Mo., Boys' Dormitory, 32 by 100 feet, cost $10,000; projected. For J. R. Maupin, frame residence, 31 by 52 feet, cost $3,000; projected. For N. Cory & Son, three-story brick store building, 23 by 100 feet, cost $6,000; projected. For R. B. Viles, two-story brick store building, 20 by 90 feet, cost $3,800; projected. For Fred Lazier, North Springfied, three-story brick store building, 22 by 100 feet, cost $6,800; projected. Also several smaller buildings under way, aggregating $5,700.

Hannibal, Mo.— Architect James Oliver Hogg reports: For Mr. James Alford, at New London, Mo., two-story brick store building, 22 by 60 feet, cost $3,000; foundations in. For Mr. Frank Buchanan, at New London, a two-story brick hotel building, 30 by 60 feet, cost $6,000; contracts not let. For Christian Church Society, at Fayette, Mo., brick church building, 42 by 64 feet, Mann's sandstone and galvanized iron trimmings, cost $6,000. Also remodeling interior of court-house (Champaign Co., Ill.), cost $3,000.

Illinois Corporations.— The Galesburg Brick and Terra Cotta Company; capital stock $50,000; incorporators are L. L. Scott, Joseph Pine, W. H. Horrsel and others. The Tipton Lumber Company, at Chicago; capital stock $24,000; incorporators, Hiram S. Tipton, Francis Beidler, Benjamin J. Jerguson and Wm. J. Beidler. The Western Excelsior Electric Light Company, at Chicago; capital stock $25,000; incorporators, Frank J. Gridley, Austyn W. Granville and J. P. Estabrook. The Chicago and Suburban Street Railway Company, at Chicago; for the construction of street railways in the city of Chicago and other portions of Cook county; capital stock $503,000; incorporators, Roscoe W. Gage, Wm. H. Calhoun and H. H. McDuffee. The Blickensderber Medicine Company, at Chicago; capital stock $100,000; incorporators, Ulric Blickensderber, Frank DeWitt and John W. Farwell. The Glencoe Hotel Company, at Chicago; to erect a hotel at Glencoe, Cook county; capital $22,000; incorporators, Charles A. Hale, Davis J. Whiting and C. H. Howard.

Lafayette, Ind.—Outlook fair.

Architect James F. Alexander reports: For Jesse Sumner, two-story and basement brick residence, 47 by 68 feet, cost $18,000; nearly completed; J. Stoneberger, builder. For Henry Taylor, two-story pressed brick and stone residence, 46 by 66 feet, cost $20,000; nearly completed; Herzog & Watkins, builders. For John M. Larue, two-story brick residence, 36 by 62 feet, cost $6,000; nearly completed; L. Fleming, builder. For John F. McHugh, three-story brick store block, 37 by 132 feet, cost $11,000; completed; D. P. Wortman, builder. For C. M. Homer, two-story hotel and bank building, 42 by 110 feet, cost $9,000; under way; J. T. Rhodes, builder. For Tippecanoe county, three-story and basement stone court-house, 170 by 186 feet, cost $400,000; nearly completed; Chas. Pearll, builder. Also brick boiler-house, one story, 36 by 80 feet, cost $6,000; completed; J. Chew, builder. For W. J. Cunningham, two-story brick residence, 37 by 64 feet, cost $5,000; under way; D. P. Wortman, builder. For S. P. Thompson, two-story brick residence, 46 by 68 feet, cost $10,000; under way; J. Melay, builder. For J. R. Hall, three-story frame hotel, 43 by 70 feet, cost $6,000; under way. For C. E. Armstrong, two-story double frame tenement, 45 by 60 feet, cost $5,000; under way; D. P. Wortman, builder. For C. E. Armstrong, two-story frame residence, 30 by 60 feet, cost $4,000; under way; D. P. Wortman, builder. For James S. Rodgers, two-story frame residence, 40 by 70 feet, cost $7,000; J. W. Lee, builder. For L. N. Stapleford, two-story frame residence, 32 by 56 feet, cost $4,500; D. P. Wortman, builder. For Purdue College, two-story brick shops, 110 by 130 feet, cost $15,000; projected. For Chas. Andrews, two-story frame residence, 38 by 56 feet, cost $3,000; under way; Christ Wild, builder. For Geo. Hettle, two-story frame residence, 40 by 63 feet, cost $4,000; under way; Christ Wild, builder. For Fred Ebler, two-story brick residence, 32 by 68 feet, cost $6,000; under way; Christ Wild, builder. For Northern Lake Ice Company, frame ice-house, 100 by 130 feet, cost $6,000; under way.

Louisville, Ky.—Architect Chas. D. Meyer reports: For L. W. F. Hart, five-story brick, iron front, business block, 66 by 104 feet, cost $50,000; completed; F. Kimbel & Bro., builders. For Julius Winter, two-story brick, stone front residence, 28 by 86 feet, cost $18,000; under way; F. Kimbel & Bro., builders. For W. H. Von Berries, brick residence, stone front, 26 by 70 feet, cost $12,000; under way; F. Kimbel & Bro., builders. For S. P. Crail, pressed brick residence, 25 by 60 feet, cost $6,000; under way; Kurze & Knocke, builders. For C. Jenne, pressed brick residence, 25 by 68 feet, cost $6,600; under way; John Fichtner, builder. For Phil Brecker, brick residence, 26 by 80 feet, cost $5,000; under way: J. P. Will, builder. For Geo. Dickel, brick residence, 25 by 58 feet, cost $4,800; under way; J. P. Will, builder. For Chas. P. Hess, three stone front dwellings, 66 by 70 feet, cost $10,000; under way: Geo. Rommel & Bro., builders. For G. W. Swearenyen, pressed brick residence, 26 by 76 feet, cost $8,000; Lomiss & Muster, builders. For Chas T. Moench, frame residence, 24 by 58 feet, cost $3,500; under way; F. F. Dressen, builder.

Minneapolis, Minn.—The West Hotel, at Minneapolis, of which Architect L. S. Buffington was the designer, was formally opened by a banquet on the evening of the 19th ult. This hotel, which was illustrated in a recent edition, has attracted much attention and added materially to the architect's already widespread popularity, its design, construction and arrangement being a marked advance upon Western hotels in general. The interior decoration, it is to be regretted, does much to destroy the design of the architect, the general praise with which the visitor speaks generally stopping when the ladies' ordinary is reached, because of the crude and inharmonious decorations. Among the Chicago visitors were Francis Agnew, P. M. Hennesy, George M. Moulton, E. V. Johnson, Benj. Cox, M. J. Sullivan, E. R. Brainard, A. Fiedler, H. J. Donovan, Dennis Ryan, Frank Agnew, Jr. and Willis Howe. Architect Buffington is to be congratulated upon the successful completion of this mammoth structure.

The new Harmonia Hall building, located at the corner of Second avenue south and Third street, C. F. Struck, architect, is fast nearing completion. Including a high basement, the building is five stories high, the top story running back in a mansard roof, relieved with towers and turrets and symmetrical trimmings. It cannot be said to front either street or avenue, though the main hall entrance is on the Third street side. It measures 80 feet on Second avenue and 120 feet on Third street. The walls are of Indiana pressed brick, light-lined with profuse trimmings of Ohio sandstone, giving an unusually pleasing effect. The roof is 68 feet above the street, and the tower at the corner rises to a height of 96 feet. The building is slightly truncated at the corner and relieved by a projecting circular window. The basement and first floor of the building are designed for renting to business men. On the Second avenue front there are two ordinary-sized stores, with double space, 32 by 76 feet, in the corner, and a smaller store in the rear. All the upper part of the building is reserved by the society for its own uses. The main hall, 64 by 73 feet, with the gallery extending around three sides, will seat comfortably a thousand persons. It is 30 feet from flooring to ceiling. It will be illuminated with a Hickey sun-burner. The total cost of the building finished and furnished will be but little short of $60,000.

Work has been commenced on the buildings, located in South Minneapolis, to be occupied by the manufacturing of school furniture. Upward of $50,000 is to be put into the buildings. About $100,000 will be invested in roller rinks in this city this year. The two now in process of erection will consume something like 100,000 feet of lumber,

(*Continued on page 72.*)

CONTRACTORS ON TROESCHER BUILDING.

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including 60,000 feet of hardwood flooring. The St. Paul, Minneapolis & Manitoba Company will build a substantial brick freight house next year. Messrs. Bardwell, Robinson & Co. are erecting a large factory building in North Minneapolis at a cost of $80,000. It is expected the new building will be ready for occupancy by January 1. It is said that parties are negotiating for the "Brackett" Block, on the corner of First Avenue south and Second street, with the view of making a five-story brick hotel of it.

Architects Dunnell & Elliot have made a large drawing of the Baptist College building, to be located at Tower City, Dak., which will be sent to the New Orleans Exposition. The building, when completed, will cost $100,000, and the design is said to be for a very handsome structure. The Board of Education have expended about $70,000 this year in the erection of new buildings and additions to old ones. Mr. J. Spear is about to build a double brick veneered dwelling on University Place, to cost about $12,000.

Milwaukee, Wis.—Architects H. C. Koch & Co. have made plans for a new market house, for the German Market Association. The building committee have adopted the plans and work will be commenced immediately, it being expected that the building will be ready for occupancy March 1. The building will be of brick. The ground floor will contain about forty stalls and counters, and the second story will be used for hall purposes. Cost of building about $15,000.

Nashville, Tenn.—Business in the building line in this city this season has been fairly good, and wages have been fair. From present prospects there will not be much more done before spring.

Architects Matthews & Thompson report the following for their season's work: Brick and stone residence for Mrs. S. C. Douglas, cost $17,000, nearly completed; brick and stone residence for C. S. Pearce, cost $5,500, nearly completed; brick and stone residence for Mrs. Jno. C. Burch, cost $9,000, nearly completed; brick and stone residence for W. H. Webb, Jr., cost $5,000, nearly completed; frame residence, Queen Anne style, for Capt. T. G. Ryman, cost $8,500, nearly completed; brick and stone residence for T. W. Wrenne, cost $5,000, nearly completed; remodeling residence for Junk Bros. & Co., cost $3,500, nearly completed; brick and stone store building for A. Nickel, cost $5,500, nearly completed; brick and stone store building for M. S. Roberts, cost $4,000, nearly completed; two stores, brick and stone, for D. Weil, cost $18,000, completed; brick warehouse for G. P. Rose & Co., cost $5,000, completed; addition to residence of Chas. Allen, cost $2,000, completed; extension to carriage and wagon factory of Allan Bros., cost $2,000; addition to residence of Mayor C. H. Phillips, cost $1,500, completed; frame residence, Queen Anne style, for M. P. Allan, cost $4,000, under way; brick and stone residence, Queen Anne style, for H. W. Forde, cost $8,000, under way; brick and stone residence for I. T. Ray, cost $8,000; commenced; First Baptist Church and chapel, Gothic style, brick and stone, cost $65,000, under way; Oman & Stewart Stone Co., contractors; frame residence, Queen Anne style, for Hon. J. K. P. Blackburn, Lynnville, Tenn, cost $5,000, under way; brick, stone and wood residence, Queen Anne style, Dr. F. L. Matthews, Springfield. Ill., cost $8,000, nearly completed; brick and stone residence for R. H. Lacey, Franklin, Ky., cost $4,000, projected; brick and stone residence for J. F. Peters, Ironton, O., cost $3,500, projected.

Omaha, Neb.—Architect C. F. Driscoll reports: For L. Farnsworth, at Council Bluffs, Ia., two-story brick dwelling, 54 by 56 feet, cost $8,000; projected. For M. Reuter, two-story and basement brick store building, 25 by 70 feet, cost $5,800; under way; Chris. Straub, builder. For F. B. Bryant, at Omaha, two one-story frame cottages, 20 by 32 feet, cost $1,500 each; under way; John W. Dorsey, builder. For L. D. Groome, Cedar Rapids, Ia., two-story frame bank building, 20 by 60 feet, cost $3,500; under way. For A. Boehme, at Omaha, brick store building, 22 by 60 feet, cost $3,400; under way; John Hart, builder. For H. Baumann, barn and carriage house, 30 by 40 feet, cost $2,000; under way; A. Rosenberg, builder.

Ottumwa, Iowa.—Architect Ernst Koch reports: For Mr. Fred. Hermann, one-story brick dwelling, 26 by 40 feet, with 14 foot "L," cost $3,200. Also, greenhouse, 24 by 70 feet, cost $900; under way. For Ottumwa Turn Verein, "Turn Halle," brick with Rockville sandstone trimmings, basement to be used as a skating rink, building to be 50 by 136 feet, cost $15,000; foundations in.

Architect Edward Clark reports: For E. P. Howard, at Eldon, Ia., two-story brick veneer building, 22 by 36 feet, cost $1,000; two-story brick store building, 22 by 60 feet, cost $2,000; also two residences aggregating $3,200, and one store building, cost $1,900; projected.

Racine, Wis.—The committee of the whole of the board of supervisors who visited the jail reported that the building was in such a dilapidated condition that it is entirely unsafe for the purpose for which it is used, and a recommendation was made that a new jail be erected. It is probable that a new building to cost $20,000 will be erected, but action on the matter has been deferred.

Rockford, Ill.—Architects Geo. Bradley & Son report the following work for 1884: First Swedish Lutheran Church, brick and stone, 80 by 126 feet, cost $55,000; under way. Lyon Swedish Church, brick and stone, 52 by 100 feet, cost $20,000. For Messrs. Lathrop & Worthington, two-story and basement brick and stone block, 40 by 100 feet, cost $15,000; under way. For F. T. Bertrand, two-story brick and stone store building, 22 by 90 feet, cost $6,000; under way. Also, frame dwelling, 20 by 40 feet, cost $2,500. For Frank Lee, brick veneer dwelling, 21 by 46 feet, cost $4,500; under way. For Patrick Hart, frame dwelling, 21 by 46 feet, cost $4,500. For Mr. Sample, frame dwelling, cost $4,500. For Dr. Whitman, at Belvidere, Ill., frame dwelling, cost $5,000. At Rochelle, Ill., city hall, two stories, brick and stone construction, 38 by 70 feet, cost $8,000; under way. For R. Tinker, four two-story and basement houses, cost $10,000. For Mr. Pratt, brick veneer dwelling with stone trimmings, cost $4,000. For W. Reynolds, brick veneer livery stable, 40 by 100 feet, cost $4,500. For Geo. Brown, two-story brick and stone dwelling, cost $6,000; under way. Also, six frame dwellings, aggregating $16,500, and brick veneer skating rink, 55 by 135 feet, cost $3,500.

St. Paul, Minn.—The year just closing has been one of activity, equaling the season of 1883 in amount of building operations. The use of granite and other stone has increased in the fronts and ornamentation of structures. A good quality of native granite has been discovered, and Souix Falls jasper has proved valuable as a building material.

J. J. Watson is erecting a large brick double house on St. Peter street, cost about $7,500. A row of brick houses, costing $10,000, has been put up by Timothy Reardon at the corner of Fifteenth and Jackson streets. Jacob Mainzer is putting up a $15,000 residence on Oak street. A brick residence, costing $15,000, has been built by Greenleaf Clark at the corner of Oak and Fifth streets. Michael Roche is putting up a double house on Fifteenth street, between Canada and Jackson streets, to cost $5,000. Martin Hushen is building on Grove street, between Broadway and Canada, a dwelling house, to cost about $5,000. Foundations have been laid at the corner of Wabasha and Tilton streets for a church edifice for the Trinity Lutheran congregation, to cost between $30,000 and $40,000. J. E. Whitney has put up a double house on Summit avenue, near Wabasha street, at a cost of $7,000. J. Rothschild has laid foundations on the adjoining corner lot for a residence, to cost about $5,000.

Excavations have been commenced for the Judge Nelson block on Sixth street, between Sibley and Jackson.

St. Louis, Mo.— Many of the architects are already at work upon plans for buildings to be erected next year, and if the outcome is even up to what is now expected, St. Louis will make very marked progress in the building line in 1885. It is said that a number of handsome and costly structures are projected.

Architect Isaac S. Taylor has finished plans and specifications for the new Third Baptist Church to be erected on the east line of Grand, between Lucas and Washington avenues, at a cost of $50,000. The ground dimensions of the edifice are 70 by 127 feet, the facade being designed after the French Gothic style of architecture, constructed in broken ashlar masonry. The openings will be trimmed in cut-stone. A large vestibule will open upon a hall, 15 by 40 feet, on either side of which will be arranged the parlors and prayer-meeting rooms, and over these will be found the Sunday-school room and pastor's study. Back of these the main auditorium is located, 65 by 75 feet, capable of seating about 800 persons. An open-timber ornamental ceiling of elegant finish is to correspond with the pulpit and seating arrangements, which are intended to rival the most costly church fixtures in the city. A committee of the church directory accepted the plans November 21, and instructed Mr. Taylor to commence work as soon he could give out the contract.

Architect P. F. Meagher has drawings for five costly residences. He has just finished two dwellings on Market, between Seventeenth and Eighteenth streets, for Mrs. Dold, and expects soon to commence on plans for a large wholesale building to be erected on Main street. Just finished Luse Badar's three-story, $25,000, hall building, on Walnut and Jefferson avenues, and M. W. Warren's $6,500 residence on Ohio avenue, near Lafayette Park. A large warehouse is being constructed on Mullanphy, between Main and Second streets, for W. Waddingham.

Architect P. P. Furber, of Peabody & Sterns, has just broken ground for a stock brick dwelling, with brown sandstone trimmings, on Vandeventer place, for J. W. Morton. It will be a twelve-room residence, cost about $30,000.

Architect H. E. Peippers has just finished the drawings for a three-story stone building, to be erected on the corner of Olive street and Cardinal avenue by H. Sayer & Co., cost $15,000.

Architect F. D. Lee is perfecting the details and specifications for the six-story Roe building, to be erected on the southwest corner of Broadway and Pine; excavating for the foundation is under way. Mr. Lee has also made plans for a seven-story business block, on the corner of Fifth and Pine streets, the estimated cost is $190,000. Work will probably be commenced early in the spring.

Architects James Stewart & Co. have commenced laying the foundation for the new cable railroad depot; it is the intention to push the work to completion as rapidly as the weather will permit.

Architect Thos. W. Brady reports: For Thomas Galligher, two-story stone front residence, 22 by 65 feet, cost $6,000. For Hugh Redmond, three-story brick and stone residence, 30 by 54 feet, cost $9,000; cellar built. For James Cullenane, six-room dwelling and two-story store and flats, 34 by 130 feet, cost $14,000; just finished. Also, brick flats, 33 by 50 feet, cost $4,500; just commenced.

Architects J. B. Legg & Co. report: For A. H. Franke, two-story eleven-room dwelling, Eastlake style, cost $5,300: R. T. Pane, builder. For Mr. James Hoolan, two seven-room stone front dwellings, cost $7,000; Jos. J. Wharton, builder. For Mrs. R. S. Caldwell, an Eastlake style brick residence. For Mr. C. E. Hilts, at Sailor Springs, Ill., hotel, etc., to cost $20,000.

Architect Geo. W. Pipe reports plans for factory building for Southern Barb Wire Company, 72 by 200 feet, with boiler room, 37 by 42 feet, cost $15,000. For Ph Gruner, two frame dwellings, cost $3,000. Also, making sketches for fine suburban residence, to be erected in Cabanne Place, cost $10,000.

Architect Thos. J. Furlong reports: For Patrick Burns, a six-story business block, 30 by 105 feet, cost $18,000. For F. Smith, two small tenement houses, cost $5,000.

Architect C. E. Janssen reports: For Mr. Fisher, residence on Park avenue; contracts let. Preparing plans for two-story, brick, eight-room residence for Mr. E. W. Donk, cost $8,000; C. Linnankohl, builder.

Among the permits recently issued are the following: Architects Brenke & Co. for Fred. Tieman, two two-story and mansard dwellings, cost $7,500; Schildmann & Gross, builders. Architect Isaac S. Taylor for John Gahmann, two-story, seven-room dwelling, cost $5,500; J. H. Keefe, builder. To Mrs. A. V. East, two-story, seven-room dwelling, cost $4,000; H. A. Silence, builder. To Leslie, contractor, two-story frame dwelling, cost $4,500. Architect E. Jungenfeld for Green Tree Brewery Company, brick addition to brewery building, cost $4,800. Same architect for Schelling & Schneider, alterations to brewery building, 44 by 44 feet, cost $4,300; Boehler & Weber, contractors. Architect E. A. P. Neukamm for C. B. Greeley, two-story, fifteen-room dwelling, cost $25,000; Daniel Evans, contractor. E. F. Hoffman, contractor, for Mr. F. Richter, two-story, ten-room brick dwelling, cost $5,000. Architects Kirchner & Bro. for P. Wiltenberg, two two-story dwellings, cost $4,800; A. Uhri, contractor. Architects J. B. McElfatrick & Son for J. M. Ghio, four-story store and flats, cost $8,000; S. H. Hoffman, contractor. Contractors Klute & Hildebrand for Mrs. C. Schlag, block of nine brick stores and flats, two-story and mansard, cost $16,000. Architect Chas. F. May for Wm. Lenion, two-story and mansard, eight-room brick dwelling, cost $5,400.

The building committee of the School Board awarded the contract for building the new Shepherd School to Chas. E. Neumeister for $18,250.

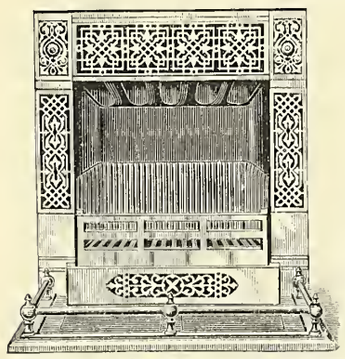
York, Neb.—Architect W. A. Bell reports: At Haldbridge, Neb., two-story brick and stone bank building, 50 by 100 feet, cost $13,000; contracts not let, above foundation. For Mr. Mayhen, an Italian villa, 40 by 52 feet, cost $5,000; plans under way. For Mr. E. D. Sayers, Queen Anne house, 48 by 52 feet, cost $6,000; plans under way.

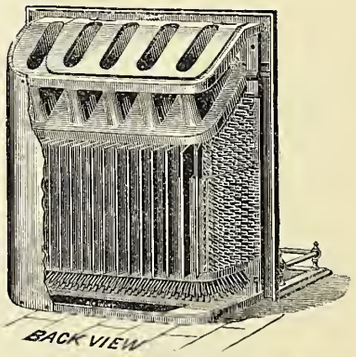
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Heat-Saving and Ventilating

GRATE.

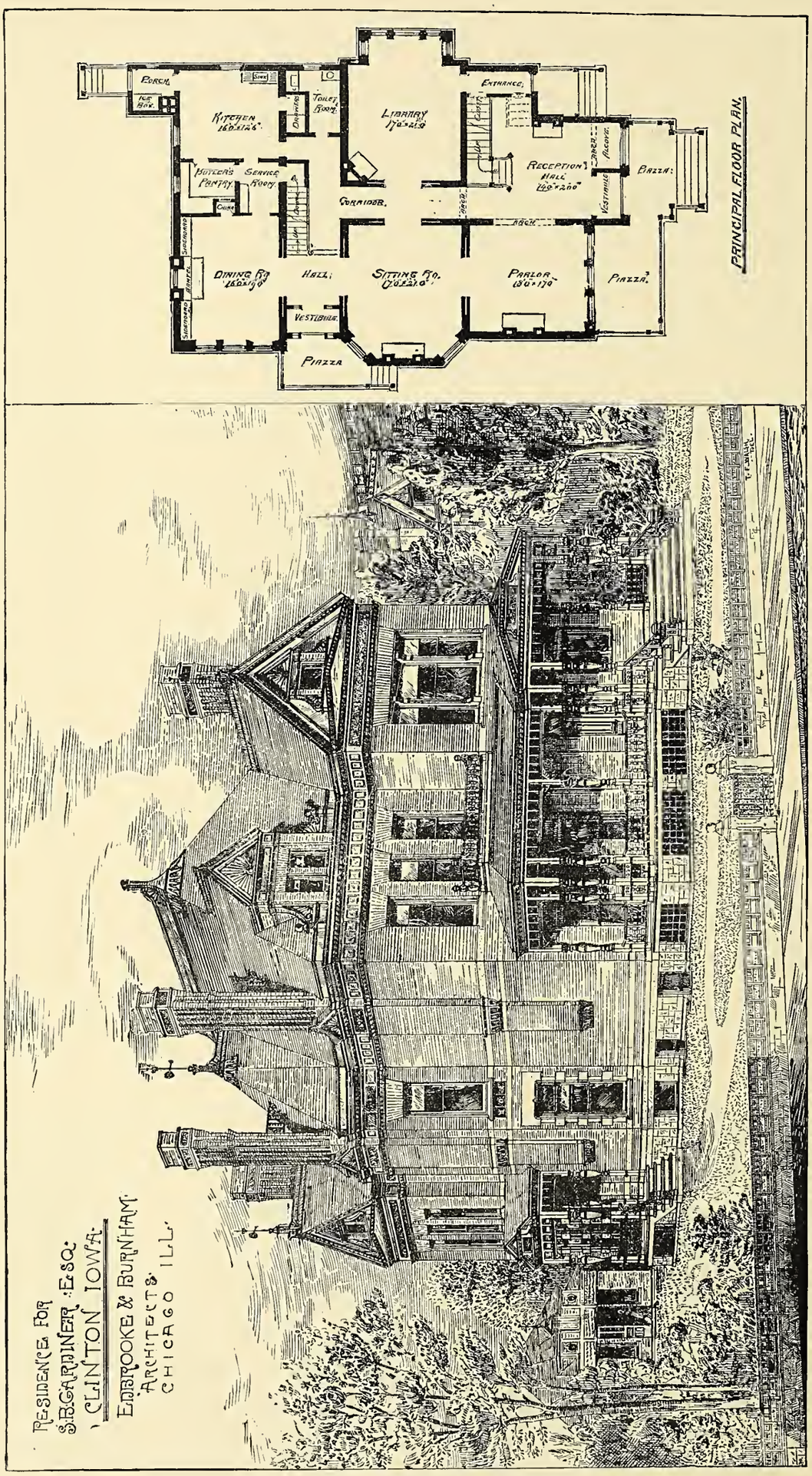


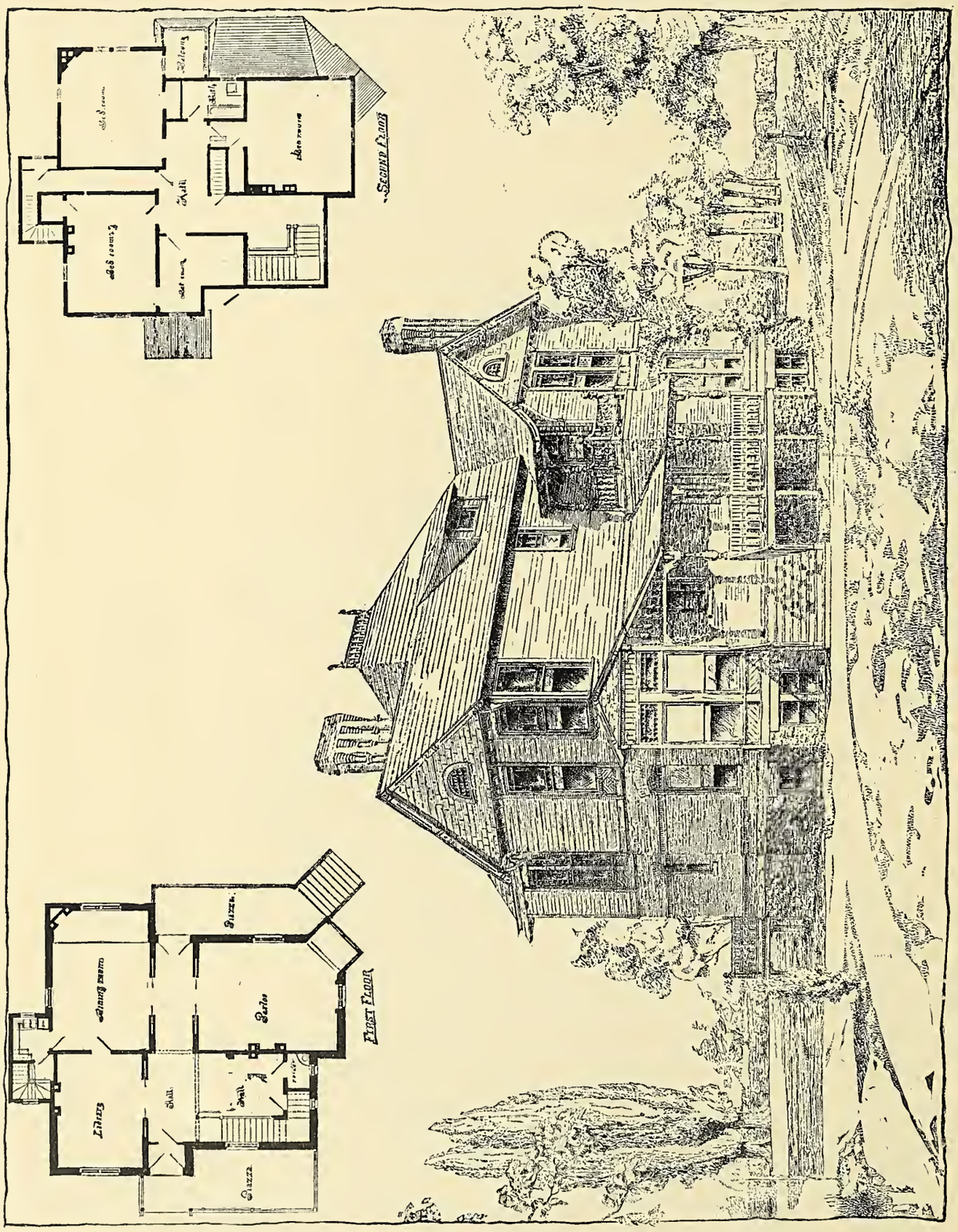


Why would you warm your rooms with fireplace heaters, that, as generally set, effect no more ventilation than a stove does, and which carry the impure air of a lower room into the chamber above. A Ventilating Grate can be constructed to heat and ventilate rooms on two floors, and in the room where the Grate is set you have the beauty and the healthful cheer of an open fire, without extra cost of fuel. It is impossible for the air of the room below to enter the chamber above.

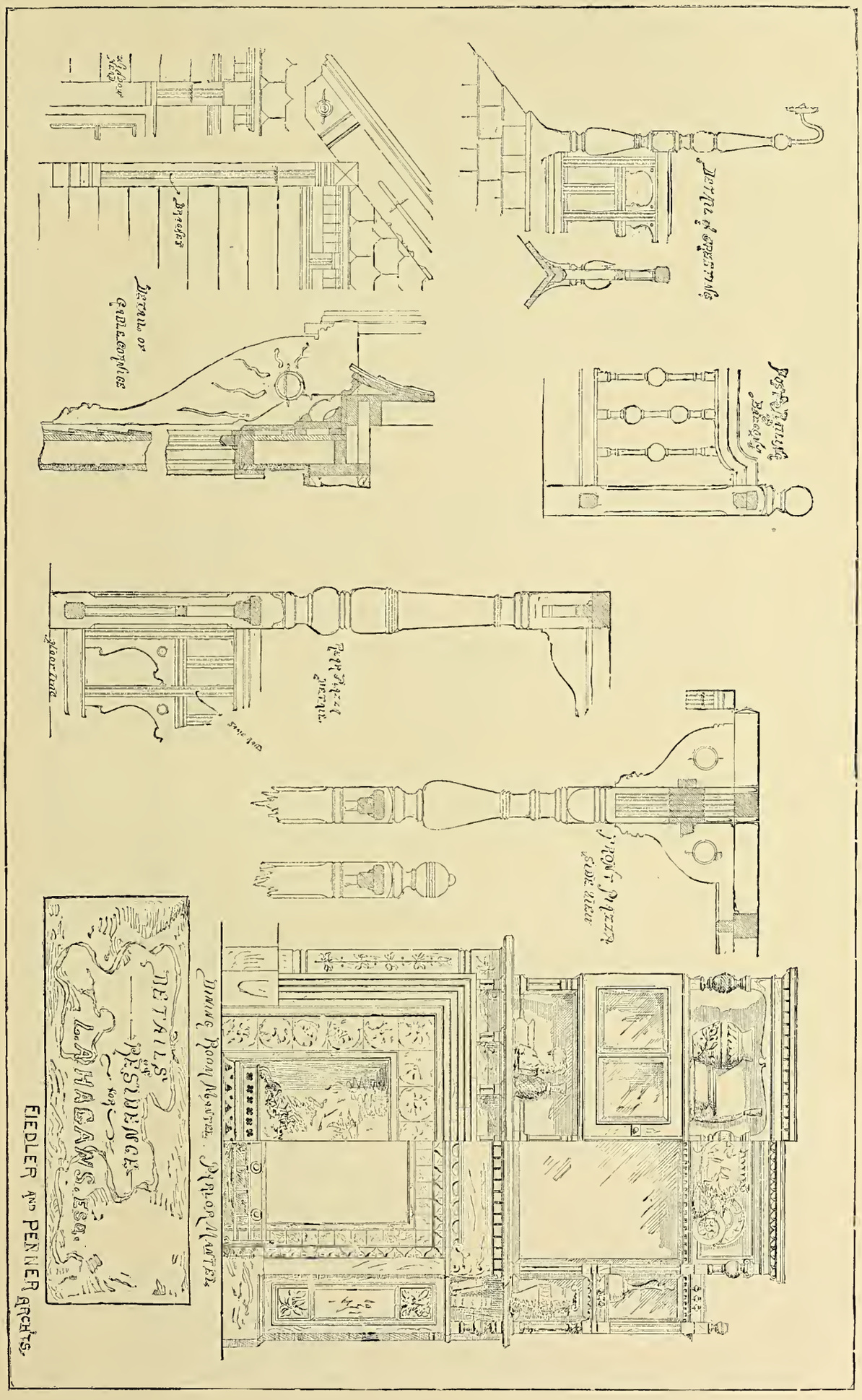
Why would you attempt to warm your rooms with common grates, that draw all their supply of air from the crevices around the doors and windows, making cold air currents in the vicinity of these, and currents of cold air along the floor, chilling the feet, and thus inducing colds? Why use such grates, which, according to the experiments of Gen. Morin, waste seven-eighths of the whole heat product of the fuel in the chimney? A Ventilating Grate will thoroughly heat large rooms—totally without draughts in any part thereof, and evenly throughout. From the same fuel, you can heat, more thoroughly in every respect, three times the room space that you would attempt to heat with common grates.

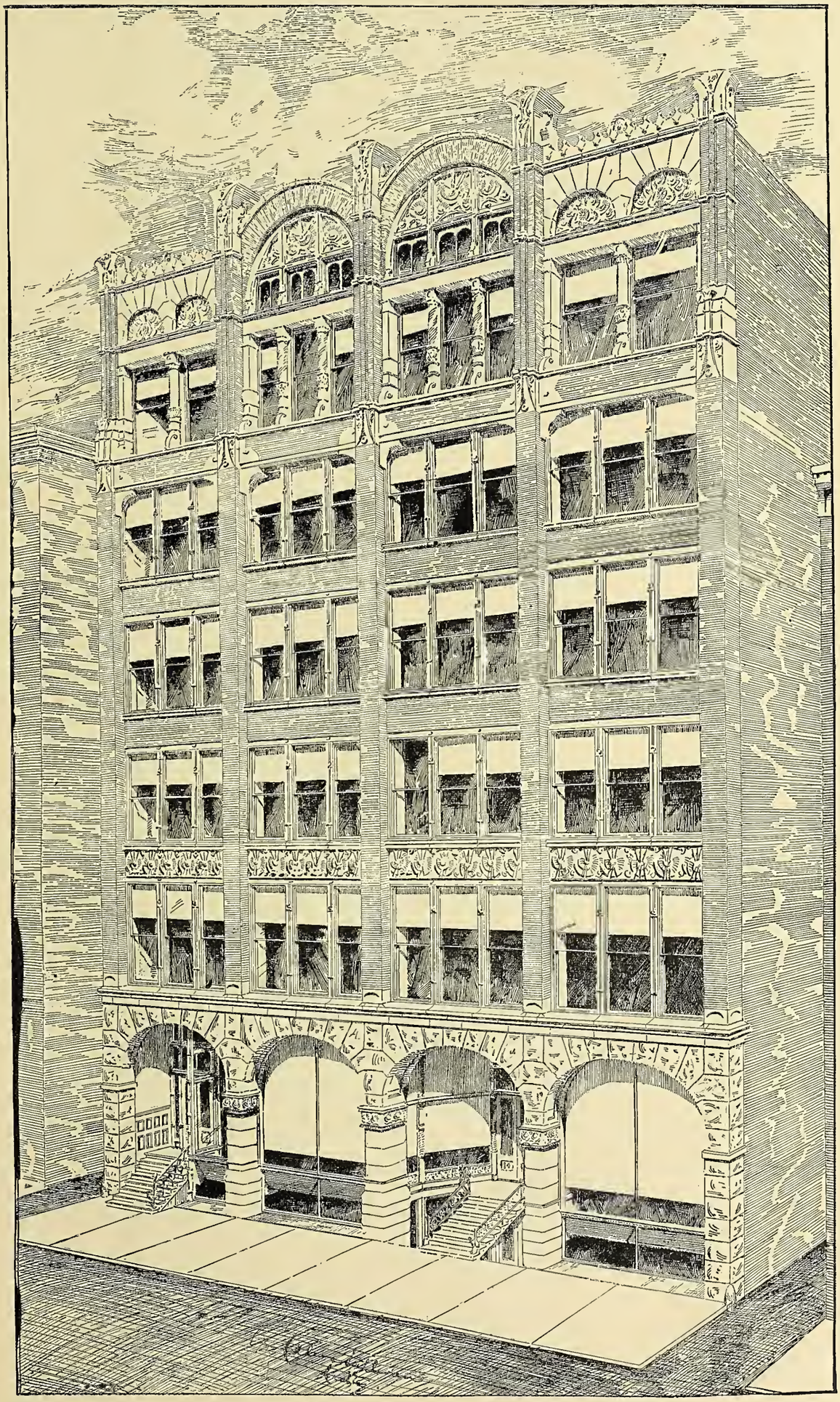
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PORCH.
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KITCHEN 16'0"x16'6"
CUPBOARD
TOILET ROOM
LIBRARY 17'0"x21'0"
ENTRANCE.
BUTLER'S PANTRY
SERVICE ROOM
CLOSET
CORRIDOR.
RECEPTION HALL 14'0"x20'0"
CLOSET
ALCOVE.
VESTIBULE
PIAZZA.
SIDEBOARD
MANTEL
DINING RM 14'0"x19'0"
HALL.
SITTING RM. 12'0"x16'0"
PARLOR 18'0"x17'0"
PIAZZA.
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PIAZZA
RESIDENCE FOR
S.B. GARDINER, ESQ.
CLINTON IOWA.
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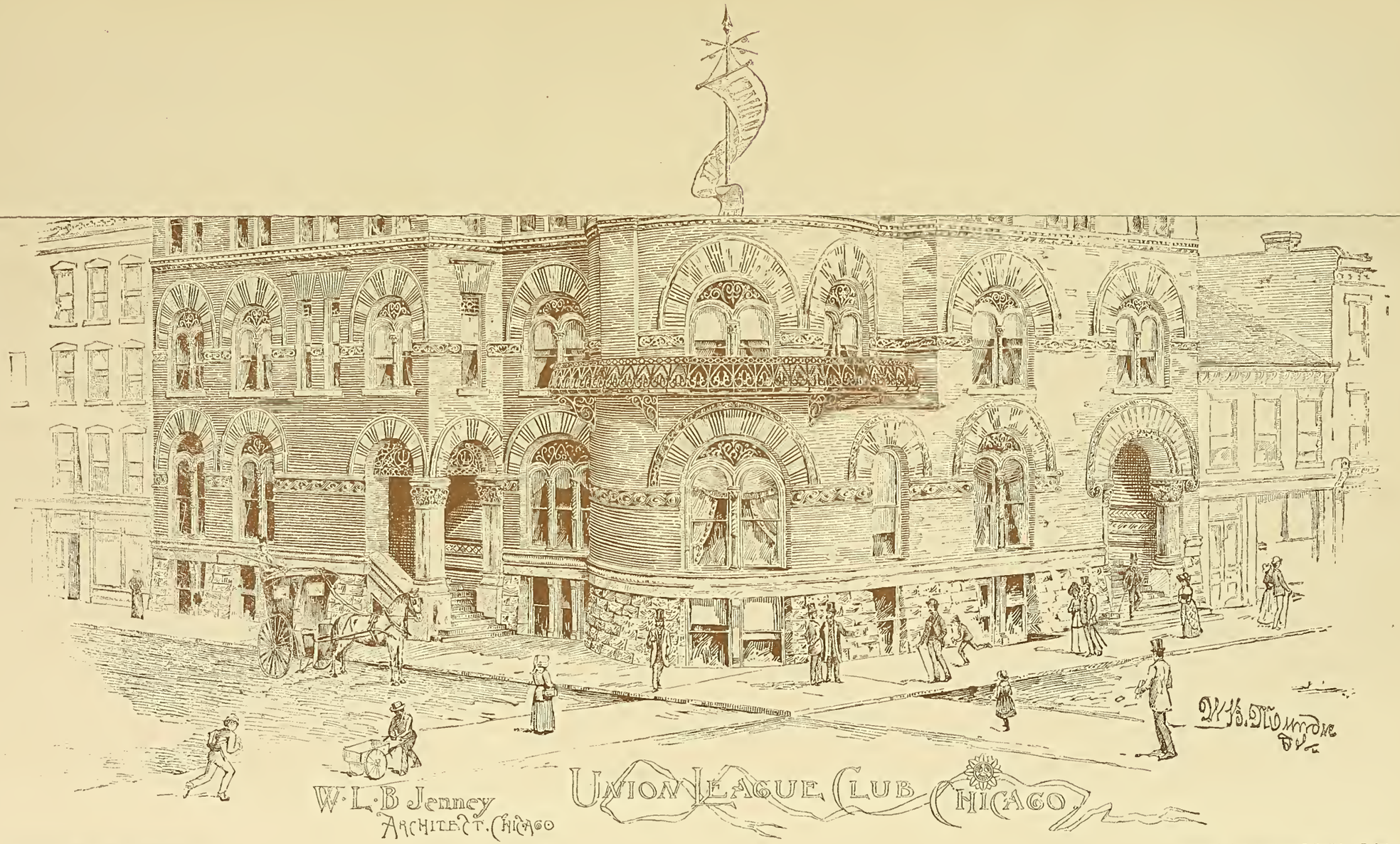


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THE INLAND ARCHITECT AND BUILDER.

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THE

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IN THE WEST.

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(A NATIONAL ORGANIZATION.)

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Important To Subscribers.

AFTER February 1, 1885, the subscription price of THE INLAND ARCHITECT AND BUILDER will be $2 per year. To get the benefit of the present rate, $1.75, subscribers who are notified by stamp "Expired," on wrapper, and subscription blank inclosed, must renew before February 1. Those whose subscriptions have expired within the past two or three months, are notified that no renewals will be received at $1.75 after that date. Subscriptions expiring within the next three months may be renewed before February 1 at present rate, but not later.

THE annual report of the supervising architect of the treasury has been received. The appropriation for the technical force of the office was $120,000, and upon the recommendation of the supervising architect, was increased $20,000. There were forty buildings authorized by the Forty-seventh Congress, the plans for twelve of these being so far advanced as to admit of the commencement of work. This session of congress also authorized additional appropriations for buildings at Leavenworth, Kan., Minneapolis, Minn., St. Joseph, Mo. and Syracuse, N. Y. The special features of this report seem to be, from the architect's statement, the inadequacy of some of the appropriations, making insufficient allowance for fire-proofing and the like disproportion between the appropriation and the structure to be built; in some cases the amount being less than would cover the cost of a building of sufficient size of the cheapest materials. The supervising architect seems to have intelligently attempted to discharge his official duties, and his first year has been one of the busiest, as well as one of the most successful the office has seen. It is hoped that the recommendations of the present, as well as other supervising architects, notably Mr. Potter, will be considered, while changes about to take place in that important office are being contemplated.

ARCHITECTS of the state of Illinois are requested by the secretary and board of directors of the W. A. A. to meet in Chicago on the 16th inst. for the purpose of forming a state association under the laws of the national association. Although the proposed state association will be largely composed of Chicago architects, those at other points should not fail to be present, that their interests may be fully represented, and they may take a broader form than if composed purely of those whose interests lie in one direction. It is the desire of the directors in this, as well as in the formation of all state bodies, that the interests, not only of the majority, but of each individual member of the profession, may be fully served, and the harmony that marked the formation of the national association may be perpetuated in each of its branches.

IT is somewhat strange at first sight, but perfectly explainable, that while the volume of general business, in 1884, was less than that of 1883, that the amount for building exceeded the previous year by a large percentage. From the carefully gathered and compiled figures of the Chicago *Tribune*, the general business of the city was 11 per cent less than that of the previous year, though the quantity of goods sold was but 2½ per cent less, the difference being made by low prices. The building for 1883 aggregated $15,648,700, while for 1884 it reached the unparalleled figure of $19,062,570, almost one-quarter more. The reason for this is, that general over-production in manufacture, and the consequent low prices, leads capitalists to seek other investment, and none presents so sure a return as improved real estate. The growth of Chicago is rapid, and well constructed and conveniently arranged and located houses are never without tenants at a good rental, while the same rule holds good in regard to the new business quarters and office buildings. It is not the new buildings, but the old, that will first be obliged to look for tenants. The outlook for 1885 is more than promising, and as we have said before, building will run in the direction of residences of moderate cost and the improvement of down-town lots and also those, such as on Wabash avenue, north of Sixteenth street, for store purposes. We are collecting, and will publish in our February edition, as complete a report as can be obtained of the building of the past year in western cities, figures that it is impossible to obtain directly upon the first of the new year.

ON the second day of March next will be laid the corner stone of the capitol building of the State of Texas. It is now three years since the proposals for building this mammoth structure were called for, and the work, though it commenced early the following spring, has hardly gone above the foundations, the walls having been recently completed and the work of laying the iron joists for the first story floor just begun. There has been much controversy and discussion over the stone that is to be used in the walls. The native limestone was at first deemed the proper material, but upon objection being made to this, a search for stone was commenced which discovered building material in granite, as well as limestone that was before unknown. The search has resulted in great value to the state at large as well as providing a granite instead of limestone for the capitol building. The former material being found in Burnet county, of a dark red color and well adapted for building purposes, and will prove a valuable addition to the geological resources of the

state. The foundations as completed rest upon the solid rock. The walls are nine feet in thickness, those under the dome being ten feet, and have consumed in their construction 91,000 cubic feet of concrete work, 170,000 feet of cut stone, 109,000 feet of rubble stone and 90,000 feet of granite. These foundations are to support a building only second in size to the national capitol at Washington, and larger than either the parliament buildings of England or those of the German Reichstag. The foundations cover 566 by 288 feet and the dome, which like the remainder of the building architecturally will resemble that of the national capitol, will be over 250 feet high. The building is located on a rise of ground near the center of the city, and it is to be hoped that no clashing of interests or interferences with the designs of the architect will conspire to make this great structure other than a grand architectural creation, though the manner in which the plans were secured, together with other forms in the state board's procedure, leads us to doubt as much as we hope for their successful consummation. The contract with the builder calls for its completion upon January 1, 1888.

CONCERNING the rebuilding of the Grand Opera-house at St. Louis, it is understood that the "competition" lies between a St. Louis and a Chicago architect. As near as the facts can be obtained, it seems that the St. Louis architect has offered to make plans and build an opera-house, such as is required, for $50,000, and though the design of the Chicago architect is favorably received by the owner, Mr. Pierie Chouteau, this offer stands in the way of an immediate settlement. The owner seems anxious to build an opera house that will be a credit to himself and to the city, and will probably be willing to pay for designs, and if the present report is true, it will be the fault of the architects if they fail to be properly paid for the production of a first-class building. While such action, *i. e.*, the offering to construct a building that should cost from $100,000 to $150,000, for $50,000, is not common, as the rules of architectural associations of course forbid it, yet there are still some, who practice in the profession, who will do it, and the public are not yet sufficiently educated up to the difference between professional practice and what passes for it, the difference only being, as a rule, observable in the completed structure. In this case, the owner's straightforward and honest wish to secure a well constructed and tastefully designed opera-house deserves a better reward, and we hope that, rather than run the risk of failure, that architects of the highest reputation may be paid to submit designs.

THE subject of the incineration of the dead is one that from time to time is brought before the intelligence of this nineteenth century, and with many claims for careful thought and some few practical arguments in its favor. Unlike the ancients who practiced this form of disposing of the remains of the departed, the argument that it is necessary from a sanitary standpoint is brought as a strong reason for its use. Of course, that the general observance of this would be sanitarily a benefit to the living no one can deny, and if there were no other principle or sentiment involved it would be practiced by the civilized world. But there is, for this strikes at one of the main pillars of the edifice of our civilization. While facts should prevail instead of sentiment, in a general sense, there are sentiments that are far in advance of facts in their importance to civilization. There are a class of men who are so intensely practical that they deny all possibility of the immortality of the soul. There are those who believe in a doctrine of "affinity," which preaches that a husband and wife can live together as such, only so long as that "affinity" exists, and that a change should be made as soon as a new "affinity" is discovered; and these doctrines are proclaimed as an advanced intelligence. The cremationists belong to the same school, and would take from the sacred rites of burial all those influences that have grown around it through the ages since the creation of man. We believe in an advance in all civilizing customs, and the advancement of the human intellect, but when the agnostic abolishes the sentiment of religion, no matter in what form it is observed, when the sentiment of home and conjugal fidelity is changed to an unfaithfulness and irresponsibility, and when that sentiment of laying our dead away in the ground—where trees wave their branches and the green grass grows above the grave, that has been as strong as the religious or the home sentiment of all peoples—is attacked and its abolition sought for by a few enthusiasts, then it is time to call a halt. Our civilization is great, and will grow with the proper education of the people, but there is a point where it becomes dangerous to carry it further, and one of our special dangers at present is the abolition of our burial system, which is attempted by the establishment of crematories in some of the Eastern States and recently by the forming of a corporation in Chicago.

AN American exhibition is to be held in London, England, to open May 1, 1886, and will include exhibits of the arts, inventions, manufactures, etc., of the United States. It is understood that beside meeting with the hearty approval of the largest merchants, manufacturers and producers, many have already applied for space, and the exhibition has been approved by the United States Government and the governors of the states and territories. The treasury and war departments will send exhibits, and also the department of agriculture and the educational bureau. One department will be of special interest to architects, the intention of the directors being indicated by the appointment of a leading American architect, S. S. Beman, of Chicago, a member of the general council. An exhibit by drawings and photographs of American architecture would be, if properly carried out, an extremely interesting feature, and one that would result in great good to the profession, both at home and abroad. In the appointment of Mr. Beman as a member of the honored body referred to, the management have paid a compliment to the profession that will be generally appreciated. As a representative western architect and a member of the Western Association of Architects, Mr. Beman's influence will do much to make architecture a prominent feature in this exhibition. John R. Whitley, Esq., is the director general, and C. B. Norton, Esq., secretary. There will be a colonial exhibition in London in 1886, and the exhibits of Canada, Australia, and India, will come in friendly competition for public approval with those of the United States.

ARCHITECT EDMOND JUNGENFELD, for the past nineteen years a prominent St. Louis architect, is dead. Mr. Jungenfeld was born in Mayence, January 27, 1840, and graduated at the Munich academy and polytechnic school in Carlsruhe. Coming to the United States in 1866, he located at St. Louis, entering the office of Architect Thos. Walsh, afterward becoming a partner, under the firm name of Walsh, Smith & Jungenfeld, and latterly in business for himself. He had a large practice, chiefly in building breweries, malthouses, etc., and had an interest in refrigerating machinery, which has been largely introduced. Mr. Jungenfeld was architect of the St. Louis board of public schools from 1875 to 1878, when he declined reëlection. He is supposed to have acquired property to the amount of $75,000, and as his

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long practice in St. Louis has been marked by success and the confidence of all with whom he came in contact, his death is a loss to the city as well as to the architectural profession.

Improvement of Architecture in this Country.

BY JAMES K. WILSON, ARCHITECT.

AT the meeting of the Minnesota Association of Architects at St. Paul, December 2, 1884, architect James K. Wilson, of Minneapolis, read the following paper on "Some practical suggestions towards the improvement of street architecture in this country:"

At our last meeting some highly interesting papers were read which discussed the question of architecture and architects; the want of appreciation of both on the part of the public, the indignities, poor compensation, and ill-treatment generally, which we are obliged to submit to; the apparent inability or indisposition of people to discriminate between an architect of ability and honesty and the veriest fraud and rascal; in short their absolute and strange indifference regarding the entire matter whatever we may think as to the interest they ought to take in it.

Now, admitting that this state of things does exist, there must be some reason for it. It may be that people are sick and tired of the whole business, and have given us up as a "bad lot." It may be, after all, that they are not so far wrong in this as some fancy they are; the question remains whether architects themselves, individually or as a class, have, in this country at least, ever earnestly, patiently, persistently and intelligently undertaken to investigate and remove these causes of misunderstanding, and so put themselves in what they conceive to be a proper relation with the public.

Certainly the matter is discussed often enough at meetings of this kind, and has been for centuries; very probably, papers without end have been written, and changes innumerable have been rung upon it. It is brought forward often, too often, because it is a convenient thing to write about. It is a stock article; something one can always fall back upon when hard up for a subject. But what, let it be asked, does this way of treating the question amount to? What has ever been accomplished by it? Can any man on earth tell?

Here is the way the thing goes, and it would be amusing if it were not really too serious to laugh at. A member gets up, gives a preliminary "h'm" and tells you he is going to read a paper, of which the title is say "An attempt to prove that the members of this society are really greater architects than Callicrates, Michael Angelo, Palladio or William of Wykeham, and that in spite of the fact we are not appreciated by the public worth a cent," or one with some other equally novel and modest title. Well, the members lie back complacently, put their hands in their pockets, think to themselves how lucky it is some other fellow has got to read a paper this time; listen with immense attention, wag their heads at each other and perhaps occasionally say "that's so."

The paper is finished, and finished it certainly is, for no living sou ever speaks or thinks about it afterward. It might as well be buried under the deep, deep sea five miles below the surface. Possibly or probably a year afterward some new member brings it up again as a thing perfectly fresh and altogether charming. Curiously enough it generally seems to be so accepted. The whole subject is gone over again down to the minutest details and then immediately consigned to the silent tomb till its next resurrection.

Gentlemen, it will be a great thing when some individual, or individuals, or some association, like this for instance, shall take it resolutely in hand to see just what the matter is, and to put this profession of ours on something like a decent footing. Some men, if there be such among us, who may actually be persuaded that they have a mission to perform, and who will stick at it through thick and thin till it is accomplished; who by earnest, intelligent, patient, painstaking work shall at length be able to insure to any one employing an architect that his house shall, at least, be decently and faithfully built; to every student of architecture, that he shall have every possible facility in learning his profession; to every deserving architect who has talent, genius, ambition, invention, blood, and life and soul in him, that he shall be recognized in precise proportion as he possesses these qualities; to the public, whose money, apart from the absolute requirements of strength, convenience, comfort, decency, even now goes by hundreds of millions of dollars annually to gratify the caprice, ambition, and cupidity of certain self-styled architects, whose only idea is to make a *big thing* out of their job in every kind of way—to insure to the public that their buildings, when completed, and apart from mere size, elaboration and general extravagance, shall be truly works of art, worthy of being compared with those of any cities in the world, and admitted by the best judges throughout Europe and this country to be such, so that people abroad may point with envy to our form of government as the reason why our architecture is the most original, appropriate, expressive, harmonious and perfectly constructed of any to be found in the world. In short, so that they shall no longer have the power to say, as they do say, and used to say of our books. "Who ever reads an American book? Who ever looks at an American building? studies one, admires one, measures one, or cares for one?"

Of course, to bring about this blessed millennium of architecture might require a long time, and cordial coöperation on part of the ablest men in our profession. It can't be done in a day, gentlemen, and there is no use talking about it. But things, seemingly far more difficult, have been accomplished. Who would have believed, for instance, that that little band of original abolitionists in New England would ever have lived to see three or four millions of men actually fighting for and against their cause in the field of battle. Would ever have lived to see every slave in the south emancipated, from the Ohio river to the Gulf of Mexico, and the astonishing changes in the country which have directly resulted from the faith, enthusiasm and labors of their once dispised and persecuted little community? Such a reformation in architecture would be a great thing, and all great things proceed from beginnings which, at the outset, appear very insignificant. But to accomplish anything someone must give it this first start. If it be a good and necessary and reasonable and altogether desirable thing, there is every probability that the idea will take. Once fairly inaugurated and accepted others will soon come forward and assist in keeping the ball rolling. The original projectors of such an enterprise would soon learn that they were not expected, and wouldn't even be permitted to do the whole work. There are too many restless, ambitious, capable, indomitable men, who would see in such a movement just the opportunity for getting rid of their own surplus energy. Who, looking to ultimate results, would see a big thing indeed. Money to be made out of it. Positions to be filled. Honors to be striven for. They would know that it must culminate in a great national organization, supported by, and under control of the government, in which all sorts of possibilities might be anticipated. The aforesaid original projectors would soon find that, if they wanted to keep the lead, they would have to possess a very high order of ability and be required to do some of the heaviest kind of working. But, in any event, should success be attained, they would be sharers in its benefits, and if there be anything creditable in the inception which creates, and the first impulse which gives movement to a great reform, they would be entitled to honor and glory to their heart's content, and would certainly get it.

The question then is, whether this is all a mere nonsense, depicting a state of things that never existed, does not exist, and cannot be made to exist, or whether it can, and will be shown that, by any kind of reasonable, and proper exertion, the thing may be realized? To bring the matter right down to a point, then, is there any place where such a state of thing does exist? Where the employment of an architect amounts to almost a guarantee that the work which he may undertake to do shall be decently and faithfully done? Where every student has all possible facilities during his course of study, or may have if he choose to avail himself of them? Where an architect may be assured that he will be appreciated precisely according to his skill, experience, responsibility, or those higher qualities of mind which go toward the make-up of a great and true artist? When the public may rest satisfied that they are in safe hands, and that their work will be done in a thoroughly creditable manner; not judged by the narrow standard of some Gothic, or Renaissance, or Classic, or Queen Anne man, or narrower still, some one who confines himself to a peculiar treatment of one of these styles, and can see no possibilities beyond it, but by some broad, and generally accepted, standard of art criticism, such as nobody can, or would dare to dispute the civilized world over?

Well, it must be said frankly, there is no such plan probably, and no such infallible criterion, and there we are, you see. In the, so-called, sister arts of painting and sculpture, there *is* such a thing. Any one may refer at once to nature, and tell whether a human figure, or a landscape be correct or not. These may be called strictly imitative arts. Architecture is not so, or if it be, it can only imitate itself, for it is entirely an artificial affair. The buildings of a nation, formerly, were the result and outward sign of its history, religion, civilization; just the thing for it certainly, though often an incomprehensible lot of rubbish to any other people. It reached perfection in its way by a very slow and gradual process. Always strictly adhering to some one original type which may have come into existence, no one knows exactly, how or when, or where. The old architects went steadily on developing their peculiar style, little by little, century after century, a trifle here and a trifle there, improving, refining, polishing—proportion, details, ornament—all so very delicately, so imperceptibly, indeed, that perhaps among others of its kind, no ancient building shows any marked individuality. Nothing went by jumps. The old architects seemed to regard themselves and their work, only as very minute parts of a great and distinct system. It appears never to have occurred to them that they

might make a reputation, and get their names in the newspapers. They were perfectly satisfied to accept their own little modest place in the work, *provided they could fill it just in the right way*, and were quite content to be buried up in their building when it was done, and never heard of any more; like those little microscopic coral creatures we read of, which raise whole islands and continents out of the ocean, and never make the least fuss about it.

Now, then, if there be no existing style which *all* regard as absolutely good, what is the next best thing to do? We don't want to invent a style, or wait for one, as those fellows did, and then take a thousand years in which to complete and perfect it. We haven't the time. Got to finish that rear elevation perhaps, or get at that confounded specification. We want to know what place *has* a style which is generally conceded to be, at least, a good one, and how that place gets along with it. Suppose we take Paris. Paris is a nice city, a very nice city. We don't know anybody who has ever been there that doesn't think it is the best built city in the world so far as street architecture is concerned and taking it altogether. Well, the houses in Paris all generally faced with Caen stone, are of uniform and noble height, all in one style (French Renaissance), are well built, and supposed to be fire-proof, at least they never seem to burn up as ours do In detail they are really exquisite in their way, and it is an exceedingly good way. The whole appearance of the place is harmonious, imposing, elegant, gay and cheerful beyond description. The architects there go upon the national and gradual development plan because they seem to like it, and the law compels them to stick to it whether they like it or not. They never complain that they are not appreciated, or that they are poorly paid, or that they are not afforded every proper facility in the study of their profession, and every other way, for these things are regulated about as well as they can possibly be regulated. The public there, after their house is built at an expenditure of millions perhaps, do not complain that they have been taken in and done for. That the building has cost two or three times as much as it was intended, and they were led to expect it would cost. That after all, it is nothing but an ill-contrived, ill-constructed, ramshackel sort of thing, and, as a work of art, simply abominable in the estimation of all judicious persons. There are none of these troubles there, and the position of architecture in Paris seem to fulfill the conditions we are looking for pretty well. What they have been, and are doing in Rome, since the unification of Italy, and the resurrection of that old city, can be better explained, perhaps, by some who have been there more recently. The probability is that they pursue the same system as in France, allowing, of course, for their own peculiar treatment of Renaissance.

In Germany they have reason to boast of a real genius, in Thinkle, who struck out into quite a new school of art as it were. A treatment of the Old Greek which is picturesque and chaste, and which seems to have become adopted as the national style in Berlin, where the people, somehow, are always trying to get rid of French influence, and appear to find it very hard to do it.

There, then, we have at least three methods to start with and select from—style, building laws, and all; although, properly, the first thing we have to consider is whether a national style is a good thing *at all*, or not. The probability is that it *is* a good thing. It simplifies the whole matter at once. The study and practice of architecture would be wonderfully facilitated; and the public would, comparatively, very soon learn to judge and criticise and discriminate, just as we are so anxious that they should do. These alone would be great points. Then, it seems self-evident that, to achieve any real excellence in building, the style must have something like permanency, and not be permitted to come in and go out like the fashions of woman's bonnet. Architects cannot be blamed for taking no abiding, earnest, artistic interest in a method of work which may be looked upon as out of date and worthless the very next season, when some newer one comes along, upsets every principle they ever learned, taught, practiced, respected and loved. It leads them to say bad words about their country, and to doubt whether there be anything really true and durable in art. It obliges them to begin to learn all over again, like boys, in some style which may be absolutely distasteful to them, or be left in the lurch by other more pliable men, who are supposed to be enterprising and better up to the times.

What true and safe progress can be made when one has to be eternally setting himself back, and putting himself forward like that intolerable spider of Robert Bruce, which we are everlastingly hearing about? Besides, how can the dear public, which some of us are always so dreadfully anxious to educate up to the thing, you know, how can this poor, benighted public be expected to familiarize itself with every system under the sun, from Timbuctoo to the Sandwich islands, so that if a new style should happen to turn up next year, they will be able to tell or know all about it. The truth is, your gentle public will tell you that if you are going to make such an idiot of yourself, it is not, and that you and your precious architecture are humbugs to expect them to do it. That it always did regard you as simply a necessary nuisance, and that it only wishes to the Lord it could get rid of you and the whole business in one lump. That's the way your much wronged and deeply exasperated public would talk.

The truth is, that in England and the United States there is no such thing as consistent street architecture worthy of the name. There are many exceedingly well designed buildings, superb buildings in cities, and many architects who, in cultivation and natural ability, are equal to the best anywhere. But good town buildings are unhappy, isolated structures, and the better they are, the more this is apparent. They stand around in spots, and always have the appearance of looking about them in a forlorn, dejected way, as if searching for some congenial companion, and a miserable, humiliating consciousness that all the pains which have been taken with them, and all the praises they may have received are nothing but vanity and vexation of spirit. That the very next year, or the very next month, some big fellow may plant himself right alongside and overtop them by ten full stories; his front bedecked and bedizened with every manner of projections and gew-gaws, any kind of trash, so that it be a "new style,"—God save us!—and their little modest beauty be utterly extinguished and eclipsed forever. This is not a good way for any deserving and well constituted building to feel.

Street architecture, and that is all this whole paper refers to, must be harmonious in style, connected and permanet. There may be all the variety imaginable, and perfect liberty; only variety must not be allowed to degenerate into frivolity, or liberty into license and riot. To obtain breadth and unity, simplicity and beauty, there must be some one dominant idea prevailing, and that is what is intended to be conveyed by the word "style." It is astonishing how comparatively plain and unpretending buildings may be made to look well, when each one is designed to support and assist every other one, and to contribute towards one grand, complete effect.

We have a block of buildings in our mind now, of no especial merit architecturally, easy to make, very easy to make, but which is satisfactory and impressive, simply because it complies with the important rule mentioned; and anyone comparing it with other blocks, such as we usually see around us,—heterogeneous in every respect, one building up and another down, of every possible size, form, color and material,—ought to be convinced that one big homogeneous thing is infinitely better than a lot of little, discordant things, no matter how picturesque the latter may affect to be.

Now to those who may think there is a considerable amount of slavishness in this one style business, there may be a word to say. What will these gentlemen who insist on perfect freedom in such matters think of another French law which compels an architect in all cases to superintend his own work or take the consequences? Would he think that an infringement of his prerogative? Or, more than that; what would he think of a law which obliges his client not only to employ him as superintendent, but to pay him the full five per cent for his services on all occasions? Isn't it getting to be awful? Yet that is the way they do there, and even worse than this. An architect is held personally responsible for his work. If anything goes wrong through his incompetency or carelessness, or that of others even, he has to pay for it, though it take every sou he may have in the world.

A case occurred some time ago. One of the oldest and most respected architects in Paris was unfortunate enough, or imprudent enough to allow himself to be persuaded to make drawings for an important building outside of the city, and where he could not give it his personal supervision. He had a written contract in regular form, to be sure, which, he supposed, released him from any liability in its construction. Well, the building failed from some cause or other, and down came the law on him, contract or no contract. It took every cent he had, and the poor man died broken-hearted. There was the most intense sympathy for him. Every effort had been made to save his fortune for his family, but the law was inexorable, and pay up he had to. The architects of Paris attended his funeral in a body, but that probably did him little good. Of course some may say he had no business to be an architect and a Frenchman at all, but that is the way they do there, and there is no getting over it.

Having thus briefly stated some of the main points, our duty is to sum up and see how we stand.

To make any real permanent improvement in the condition of street architecture here, we must: (1) Begin to make the effort to do it. (2) We must get everybody who will do so to help us in the matter. (3) We must talk it up, write it up, fight it up through thick and thin, till it be accomplished. (4) We must have a *National Institute of Art*, as France has; built by government, endowed by government, supported by government, and furnishing every possible facility and inducement to a thoroughly professional education. (5) We must have a national style, at least for street buildings, and be obliged to conform to it. (6) We must make architects personally responsible for their work. (7) We must have laws protecting them in their proper authority and compensation. (8) We must be very careful in the selection of pupils, be paid for teaching them, and be

compelled to do them justice. (9) Work must be subject to just criticism, hurt whom it may.

This will answer to begin with. If we get a start and see a chance for improvement as we go along, so much the better. Many other thoughts on the subject might well have been included in this paper, but it is already too long, and others may supply them. What we want to do now, is to keep this ball rolling, so let us all give it a shove and keep at it, or forever hold our peace.

Engineering in Architecture.

BY "T SQUARE."

IN every true architect there is a manifold existence, or individual, and some of the parts of that existence are so diametrically opposite that it is hard to conceive of. This difference is particularly noticeable when we first view him as the *artist*, who, by his imaginative genius, conceives a design and grasps in advance of execution all the effects of combinations of solids and voids; detecting in his study all surroundings that will add to or detract from its beauty or utility, thus bringing out the building in its perfection; and secondly as the *constructing engineer*, who casts aside all imagination as to results, and coolly calculates the requisites of proper and substantial construction from axioms established by his own experience and that of other masters. We might continue and follow the lines of other accomplishments—as sanitary engineering, mechanical arts, and sciences—which enable him to follow technically every workman engaged on his buildings, from the man who lays the drains to the accomplished artisan who puts on the finishing draperies; but our purpose is to particularly call attention to the theme, and the analysis will be of profit if we can silence every other thought of him and follow the detail.

When building materials and labor were comparatively cheap, and the dimensions of walls could be more than required, and also the feelings of owners were in favor of building structures to stand forever, the architect had little else in thought than the purposes to be gained. Had engineering then assisted him those works would yet be standing, but the rule of thumb in construction proved of no use to retain the massive walls in their places. But now, all is changed, the prices of material and labor seem fabulous in comparison, and it had to be saved, and how to save it and use it right becomes the peculiar forte of the engineer.

From foundation to roof he must now be mathematically certain that he has just enough of the right kind of material in the right places, and must avoid all unneccessary weight; and we see evidence of skill in suiting the construction to large openings, grand entrance ways, projecting towers, starting from pipestem piers and all in place as solidly as skill can make them; the looker-on amazed that it can stand, but still assured because it does, that it will. Engineering has given to the builder a thorough knowledge of all kinds of material suitable for building purposes, computing its value in strips, solids and twisted shapes, and it hardly matters what kind of a peculiar twist fashion may demand on the front facade, it can be adjusted and balanced to a mathematical certainty; woe follows if imagination is allowed a place in deciding the result, as surely as night follows day. Our architect can not be poetic or timid; the master mind, backed by positive facts, must be his guide; his hand must be steady, and the long columns of uninviting figures be summed up accurately.

Fine appearance is not only demanded, but true substantial construction. An architect may be a perfectly competent designer and yet prove a tyro in construction. Too many are incompetent, as is proved by the blundering manner buildings are erected; as is shown by numerous cracks known to exist in supporting walls—a constant menace to life and limb—no particular attention to them being apparently given until too late to mend the catastrophe which follows.

Those who study engineering are bound to outstrip those who are simply artistical architects, because people are being well educated in the requirements of safe construction, and are learning to demand safe as well as handsome structures. Because some architects stand still in their studies it is no evidence the world is not progressing, and too well do those now practicing know the necessity of either being familiar with the science of engineering or having an assistant who is. Students in offices learn to look up to the assistant who confidently handles the construction with facts to guide him, and, if our words are not in vain, those students would do well to think seriously of knowing the sources of that knowledge. It is well to be able to make pretty pictures, and the artist is just as necessary as the engineer, and while we grasp one branch with the right hand we must also cling to the other with the left.

There is a tendency to overestimate the value of money in building, and owners are grasping for all they can get, and contractors more willing to leave undone than to do; and to the younger members of the profession we can advise the most careful consideration of their commissions and their clients' true interests. To build properly for a client, first consider a convenient well arranged plan, then the form and design suited to the plan, the surroundings and the purposes, and before going further know, for a certainty, the true value of the elements of construction; and if there is still means to spare ornament the construction, jut out the bays, the oriels, the towers and balconies, and so on *ad infinitum*, and true success will follow your efforts. To beginners—don't forget the value of Davies, or Euclid, and the tables of tested strains of material, either in solids or built to span spaces; do not let the more pleasant occupation of doing pretty things on paper cause you to forget they will prove air castles if not followed by matured thought of things more material.

Congratulations from A. I. A. to W. A. A.

At a meeting of the directors of the Western Association, held in Chicago on the 7th inst., the following letter was read by the secretary.

NEWPORT, R. I., January 2, 1885.

HENRY L. GAY, Esq., *Secretary Western Association of Architects:*

DEAR SIR,—At a meeting of the Board of Trustees, A. I. A., held on the 17th day of December, 1884, the following resolution was adopted:

"That the secretary of the A. I. A. be instructed to forward to the secretary of the Western Association of Architects, twenty-five copies of the schedule of charges adopted at the 17th Convention (October 23, 1884), and at the same time to congratulate the Association upon the successful formation of a society having kindred aims with the Institute."

I have now the pleasure of transmitting to you this resolution with the schedules. I trust that the Western Association will be the means of accomplishing much good, and that the A. I. A. and the W. A. A. will long continue to work together in harmony in the development of our national architecture. Believe me, sir, very truly and fraternally,

GEO. C. MASON, Jr., Secretary, American Institute of Architects.

[The schedule of charges will be printed next month.—ED.]

The First State Association W. A. A.

THE following report of President Hodgson to the Minnesota Association will be read by architects generally. It is the dignified, yet modest report of one of the prime movers in the recent convention, and to whose practical intelligence much of the phenomenal success of the convention was due:

Having called Mr. Wilson to the chair, President Hodgson, as delegate to the Chicago convention of architects, submitted the following report:

Gentlemen of the Architectural Association of Minnesota: I beg leave to report that when, as your representative, I proceeded to the Chicago convention of architects, I had no assurance that I could succeed in impressing the members of that body with the importance of a grand western organization based on the broad, sound principles laid down in your instructions to me, and which fully accord with my own convictions. Indeed, I had serious doubts in regard to the probability of accomplishing satisfactory results, because I feared, from what I read in local and also foreign journals that the Chicago leaders of the western association movement would have articles of association already prepared on the American Institute plans, awaiting only the meeting of the convention of western architects to vote them through to the exclusion of state associations, which have proved so beneficial and in which we are all so deeply interested.

Such, however, was not the fact. On the contrary, I found the Chicago architects quite willing to take a back seat in the proceedings of the convention and allow non-resident members of state and other associations to dictate the plan of organization.

Never have I seen better feeling and more magnanimity than was there manifested by the Chicago members of the profession in regard to the organization of the association.

And as to their noble hospitality, I feel certain that all the visiting members whose good fortune it was to be their guests during the happy period of the convention, will agree with me in giving them the highest pedestal among the best and heartiest of good fellows.

To be brief, however, I have only to say that the views and desires of this association, as set forth in its instructions to its delegate, have been substantially adopted and incorporated in the constitution and by-laws of the grand organization known as the Western Association of Architects.

I sincerely regret that the full proceedings of the convention are not yet printed, but they certainly will be in the course of a few days, when every member of this association can readily procure a copy.

The way is now fairly open for each and every member of this association—the only one now properly organized under the laws of the state, and also *ipso facto*, under the new regime—to avail himself of his rights and take his proper position, as Fellow, in the Western Association of Architects, which, with the well performed duty of every member, under the guidance of the great architects of the universe, cannot fail of good and great results to each and all of us, and also to the public, whose life, property and prosperity depend so much on the honesty of our efforts in the faithful performance of our arduous duties.

Respectfully submitted, I. HODGSON, *Delegate.*

Convention Notes.

ONE hundred and forty names were accepted by the convention and were enrolled as members of the national association.

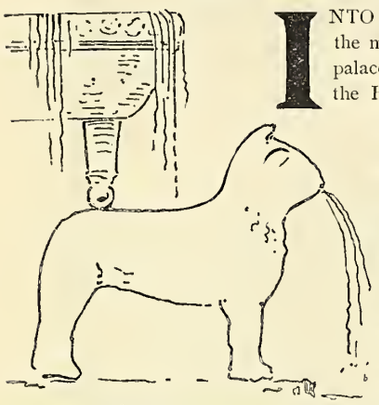
HAS anyone thought of the relation that tough hog bore (b-o-r-e) to the unperishable and indestructible quality of the constitution.

THE Chicago *Times* reported Chairman Burnham's opening speech *verbatim*, and it was generally remarked that the report of the entire proceedings by that paper was well condensed and accurate throughout.

European Sketches.

BY IRVING K. POND.

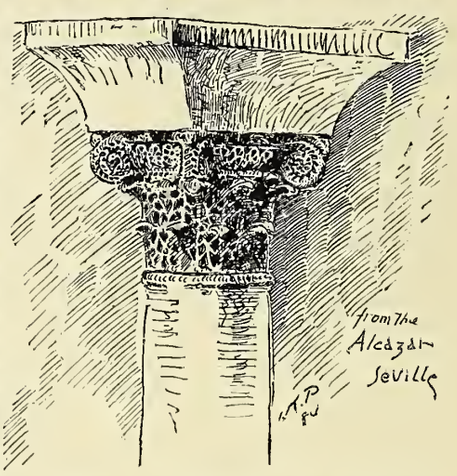
PART II—THE ALHAMBRA.

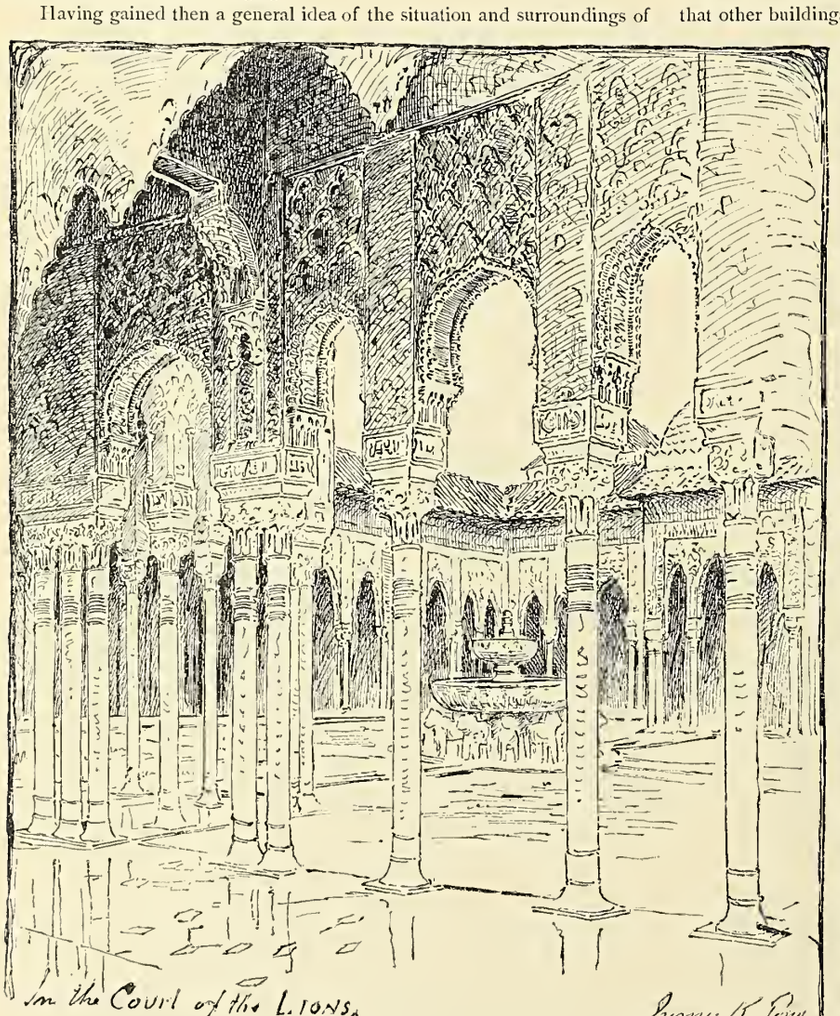


INTO the Court of the Lions open the most beautiful chambers of the palace. To the right as we enter is the Hall of the Abencerrages; to the left the Hall of the Two Sisters, and directly in front, the Hall of Judgment. The reason in the last name is obvious. The first mentioned takes its name from the Knights of the Abencerrages, who were treacherously murdered therein, while the second is named from two immense marble slabs, in the pavement, which were sawn off the same block. The domed ceiling of the Hall of the Abencerrages is one of the finest examples of stalactitic ornamentation, and is indeed a marvel of intricately disposed lines and surfaces; theoretically, simple enough; practically, enough to drive the artisan insane. The decoration of the hall is perfect throughout, although the ceiling is the particular feature. It would seem that each court and hall had some one feature which is more beautiful than similar features in the other apartments. Thus, the columns and capitals in the Court of the Lions, the arch, the most beautiful of all Moorish arches, in the Hall of Judgment, the niches and window alcoves in the Hall of the Two Sisters, the walls of the Hall of the Ambassador, and so on. Opening into the Hall of the Two Sisters and directly opposite the entrance to the Court of the Lions is the apartment in which Washington Irving wrote his "Alhambra." The windows overlook a beautiful little garden, planted with orange, palm and broad-leaved banana trees, which thrill with the incessant song of birds and fountains; as fascinating a spot as one could well select for the performance of literary work of such a nature: romantic stories of love and war, and tales and legends handed down from the Moorish long-ago.

Having gained then a general idea of the situation and surroundings of the Alhambra, let us glance at its architecture more in detail and note in a rapid way, through what stages art passes to develop at last this highest type of Moorish art in Spain.

Early in the eighth century Spain was conquered by the Arabs, who brought the traditions and art of their own land. The materials of the Roman structures, of which there were many fine examples then existing in Spain, were used in the construction of the new Arabian buildings and such features as columns, capitals, etc., were incorporated in the newer work, and in everything but plain Roman architecture served as a model to the Arabian builders. The Mosque, now cathedral, at Cordova is the finest existing example of the work of this, the first period of Mohammedan art in Spain. Later, the Byzantine style influenced greatly the Arabian architecture. But in the next period, notably exampled in the Minaret, and in the Alcazar at Seville, nearly all traces of this style, as well as of the early Arabian, have disappeared, and the Roman is suggested only in the capitals of the Alcazar which are Corinthian in feeling. At this time Spain was governed by the African Moors. The Christians having again come into possession of Cordova and Seville, Granada became the stronghold of Moorish power and the center of their government. The buildings of the new city were in the pure Moorish style. It was during the first half of the fourteenth century that the style reached its highest development and then the most beautiful portions of the Alhambra were executed. There is reason to believe from the bits of detail one may find in the old portions of the town that other buildings of Granada were as excellent, though not so extensive as the Alhambra. Fragments, built into more modern walls, are destined to reveal their charms only to him who, with pick (and life) in hand, rummages among the foundations and in the dirty cellars and court yards of the wretched structures, now occupying the site on which once stood royal magnificence.

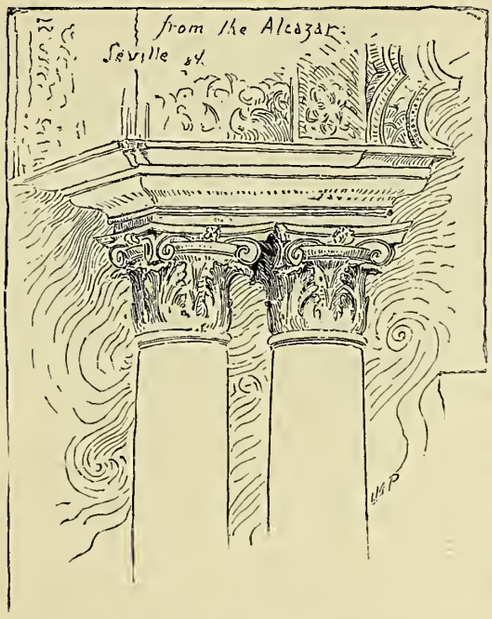




A most striking feature in all Moorish buildings is the tile dado. Each tile is of one solid rich color, and the composition is always harmonious and powerful, while the lines are often intricately drawn. The artisans seem to have reached the limit of their possibilities in this matter, at an early period, for the work in the Alhambra in no wise surpasses that in the Alcazar.

It has been said that the Moors were not constructors, merely decorators; but there is nothing to show that these builders did not understand the nature of their materials and use them to good advantage. The arch forms and vaulting of the Romans appear in the early work. But the Moorish builders seemed to recognize the weakness of the arch, and in the later work it is employed almost entirely as a form of beauty rather than of use, having to support little besides the spandrels, and these were generally, as to material and decoration, light and airy. The weight of walls and roof is carried to the columns by means of lintels and piers. The horseshoe arch seemed to them a particularly weak form constructively, and it rarely occurs even in heavy masonry walls without a relieving arch or a lintel above it.

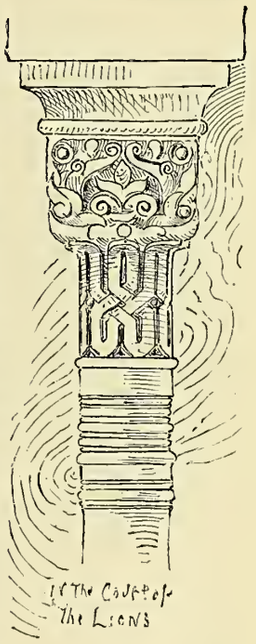
The covering of broad spaces is done by means of dome vaulting or by heavy timbers. The domes are generally semi-circular in plan, springing from the walls and from corbels which are formed in the corner angles of the room. The ornamentation of the dome is genally stalactitic, though sometimes the surface is inlaid in wood, ivory, mother of pearl, etc. A common form of truss is a simple triangle, apex up, without king post or vertical member. These trusses, if they can be called trusses, are rarely of great span. The wooden



ceilings are certainly masterpieces of execution as well as of design, for many fine examples remain from the earliest period in good, almost perfect state of preservation.

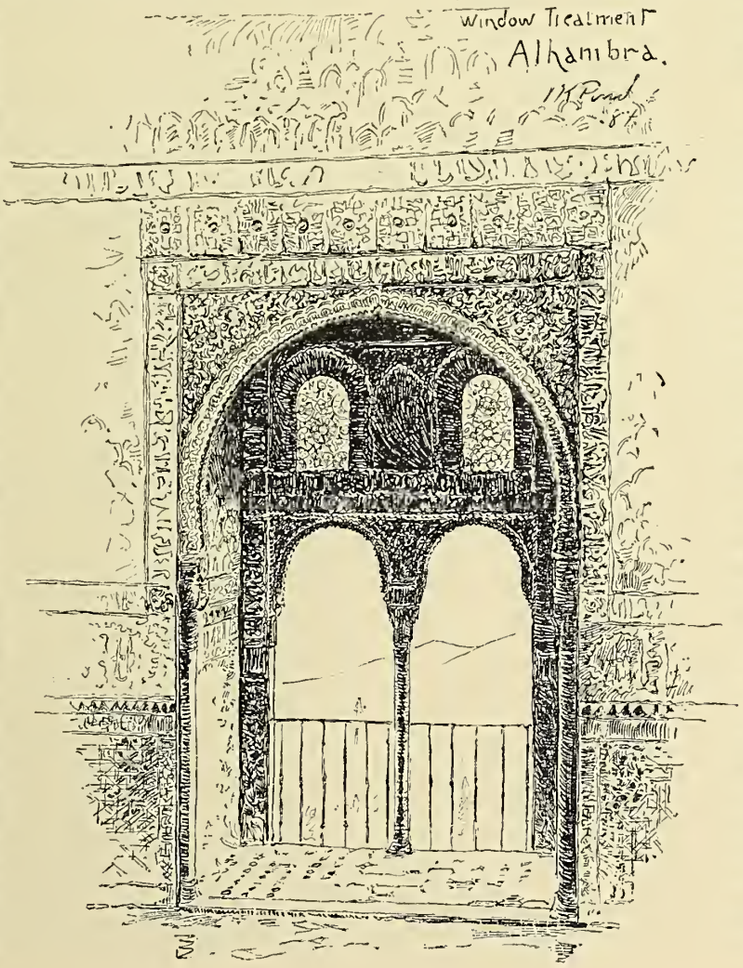
Very little of the original color now remains in the walls of the Alhambra, and it is a marvel that the slightest trace has been left to us; for during long periods of years the palace was put to base uses, serving now as a stable and now as a prison. The walls were covered thick with whitewash and the marble floors were stained and broken. Yet here and there charming little suggestions of former glories greet the vision. The Moors were more than surface decorators. They might more easily have painted the pattern, shadow and all on a flat surface. But their feeling was fine, as one must appreciate who gazes on the work in changing lights. The lines of the work are all sharp, the shadows all distinct, separating one pattern from another, and with the changing light the shadows shift, giving new effects and countless variations; now bringing out one pattern more strongly, now enforcing another, for there is always more than one pattern upon the same surface. The patterns often interlace, though in some of the most beautiful panels a more or less heavy geometric design is superimposed upon a most exquisitely light and graceful vine, the leaves of which fill the open spaces in the upper pattern. Generally the spandrels and wall spaces over the arches in the courts, and often in the chambers, are perforated, and the sunlight streaming through, touches, with great brilliancy the wall behind, and the moonlight paints upon it, in dark silhouette, the intercepting pattern. The Alhambra loves the moon for when she appears in the heavens every detail which can see her rises from its dark bed and greets her with bright face, while the marble columns come up out of the gloom and wash themselves white in her silvery flood.

Among the many points of historical, as well as of architectural, interest outside the palace, yet within the fortifications, are the little mosques, restored in all their former beauty, and the playrooms of the princes and princesses, in a tall tower overlooking the deep ravine. It was under the windows of this tower that the three Christian knights of the old story wooed the three closely guarded Moorish princesses. It was from these windows that two of the princesses, to whose hearts love gave great courage, swung themselves down into the arms of their waiting lovers, willing and glad to descend as the Christians could not (figuratively speaking) raise themselves to their level; and it was from these windows that the third and youngest sister — for these romantic princesses were sisters — though her heart was well nigh bursting with love for her knight, could not, at the last moment, be pursuaded to descend, choosing to remain and comfort her father, who, though heartless and cruel, was sensible to the loss he had sustained through the action of his flighty daughters. The knights, two of them bearing away on their swift steeds their burdens of love and the third carrying in his heart his burden of grief and disappointment, sped down the ravine and out into the plain, and though the wrath of the deserted father was hot, and though his steeds were fleet, yet love lent light wings to two and sorrow did not handicap the third horse, and soon the lovers were far and forever in advance of their pursuers.



Every stone in the great pile has its romance or its legend. Every window has looked out upon some scene of love or war, which it immediately disclosed to the fantastic mind of some story teller who in turn gave it to us; and all these stories and legends are so prettily detailed and so softly colored, and all weave themselves together so harmoniously, just like the patterns on the walls, that we drink them in and do not care for the time, whether or no there be anything of truth in them. And similarly do the decorations affect the eye; intoxicated by the surroundings, the distant glimpses of the mountains, the pretty gardens and sparkling fountains, the beholder does not care that the art nowhere mirrors nature; that in everything the work is the creation of a fantastic mind.

Through five long centuries this building has stood, a monument to a great race of poets and artists, a great race of knights and warriors; and the monument fittingly represents the race. Men bold and stern, almost forbidding in face but warm, passionate and loving at heart. Men as careful and painstaking in minor things as they were bold and strong in greater matters. These great spirits gave the world a perfect architectural monument and a model for all time, in that it is a truthful index to the character and lives of the builders.



AN extensive range of conservatories, says the *Builders' Weekly Reporter*, of London, Eng., is being added by Mr. James Williamson to his residence, Ryelands, Lancaster. A glazed corridor, skirting portions of two sides of the house, connects the sitting-rooms with the large conservatory, which is 40ft. long by 18ft. wide, covered by a curved roof with lantern. This conservatory is lofty, and is intended for large plants. Leading from this is a smaller and lower conservatory, 31ft. by 23ft., roofed by a double-span roof, hipped at the ends, for ordinary greenhouse plants. A porch entrance carried up as a tower, with Mansard roof, forms a connecting link between the two conservatories and a stove-house of less height, 32ft. by 14ft. The range has been designed by Messrs. Paley and Austin, architects, of Lancaster, and has been carried out under their supervision by Messrs. Messenger & Co., horticultural builders, of Loughborough. A ventilating gearing by means of lever apparatus, opening the entire roof and front at once, is used.

Plumbers vs. Architects.

THE following address was received by the recent convention of western architects. It was not read because of the lateness of the hour, and was omitted from the official report of the convention:

CHICAGO, November 10, 1884.

To the Architects of the West and Northwest, in convention assembled;

GENTLEMEN,—It is with feelings of genuine pleasure that we welcome you to the city of Chicago, where you have assembled for the purpose, as we understand it, of forming a western association for the promotion of the interests of your noble profession. Architecture, since the civilization of man, has been recognized as one of the most lofty of arts, as well as one of the most honorable of professions. The architect in the olden days was honored almost above any other member of the community in which he lived. The monuments of his genius are scattered all over the world. The ruins of the magnificent temples of the Assyrians, the Phœnicians, the Romans, the Greeks and other ancient peoples are witnesses of the high order of his genius; and when we recall to mind the obelisks and pyramids of Egypt, with their subterranean temples, the temple of Solomon and the Acropolis of Athens, the ordinary feeling of respect and admiration for the craft, which made these structures possible, is increased almost to one of reverence and veneration.

In modern times we find the evidences of the genius and grand handiwork of the architect quite as numerous, if not so imposing. The old world is covered with them. They loom up in all the capitals of Europe. In our own country, young, though vigorous and progressive, architecture has shown no signs of retrogression, but has shown an advancement. The Capitol at Washington, the Parliamentary Buildings at Ottawa, the Washington monument and hundreds of other structures that might be named will stand for ages as testimonials of the architectural genius of the nineteenth century.

We congratulate you, gentlemen, in thus calling together the members of your honorable profession for the purpose of consulting and planning for your further improvement. It is, from our view, right and proper that you should do so, for in united numbers and combined wisdom there is strength. We congratulate the gentleman who has established this exhibit, and thank him for this splendid display of the skilled work of the mechanic; and we, who are sent here to represent the Master Plumbers' Association of the United States solicit your coöperation and aid in advancing sanitary science, good plumbing and efficient drainage, in the hope and belief that we, too, may become renowned, not for the grand and lofty structures we may design and rear, but renowned and honored as the safeguards against bad water, bad air and bad health.

The architecture of the ancients was one of the grand arts to which pæans of praise are sung by modern poets, and which attained a height of perfection that produces admiration and wonder in this age. In the middle ages the science of house drainage and ventilation was comparatively unknown, and it has been left to later times and more progressive generations to bring it to an advanced state of development. While the kings and princes of old dwelt within marble halls of beautiful design, and rested upon couches of downy softness, they moved and lived and slept in an atmosphere loaded with vile impurities, the breathing of which meant sickness and death, and imbibed from golden goblets water reeking with miasma. To such an extent were the laws of sanitation ignored that the mortality in the human family became frightful. Plagues every now and then swept over the nations, decimating the populations like a besom of destruction; epidemics were of almost yearly recurrences. But modern sanitary science has reached such a stage of advancement that this is all changed, and these terrible visitations are of phenomenally rare occurrence. And we hope such progress may be made in this direction that within a few years these dreadful scourges of man may be numbered with the things of the past.

It is in this line, gentlemen, architects, we ask your assistance. We ought to work hand in hand in this cause; and we hope we will not be regarded as presumptuous if we suggest to you that, in awarding the execution of your plans for plumbing, in building, if you will determine to encourage men in our craft who are known to be competent and honest, you will have taken a long step toward the inauguration of this hygienic millennium. It is unquestionably to the interests of your profession, gentlemen, to do this, no less than it is to ours. The architect who plans a structure has a pride in encouraging thoroughness and perfection in the carrying out of his plans. Efficient plumbers are ready and willing to labor in coöperation with architects and builders with a view to attaining perfection in plumbing and drainage. This is one of the chief objects for which our association was formed; and, if we do say it, it is a laudable one. It has in view the improvement of the public health, the curtailment of the death rate, and the benefit of mankind.

Gentlemen, we welcome you to our city, and trust your deliberations may be of a pleasant nature, and result in much good to your grand and noble profession. Very respectfully yours,

ALEX. W. MURRAY,
J. J. WADE,
FRANK E. RUSH,
} Committee.

THE Dibble Manufacturing Co., of Trenton, N. J., have recently added four large hydraulic presses to their plant, with full outfit of fitting and finishing machinery to match. Their hemacite knobs are being used in steadily increasing quantity and are steadily increasing in favor. They are admirable door handles for all interior doors, strong, handsome, durable, pleasant to the hand, and moderate in cost. Never have they put out such well made and handsomely finished goods as now, their processes having been greatly improved by the last six years experience. Many architects and their clients have asked them to make a smooth finish hemacite knob, and such a knob they will presently offer, of handsome gothic shape, bronze mount, and head not distinguishable from finely finished ebony. Illustrated lists, free.

Lumber Notes.

AN exhibit will be made of all the woods of Illinois at the New Orleans Exposition.

A VALUABLE article upon the strength of timber appears in the current issue of the *Lumber Trade Journal* of Chicago.

FIRES in the timber and lumber yards at Adelaide, Australia, early in November caused damage amounting to $500,000.

THE lumber interests of Winnipeg have suffered serious depression the past year, and very little will be done there this year.

ARIZONA has 1,000,000,000 feet of pine lumber in a forest near its center. A single concern has cut 36,000,000 feet in the last year.

THE Menomonee *News* says that the Kirby-Carpenter Co. mills cut 460,000 logs the past season, making over 71,000,000 feet of lumber.

THE Georgia state capitol building, Architects Edbrooke & Burnham, Chicago, is to be finished throughout with Georgia yellow pine and hardwoods.

I. A. HANK, the lumberman of Chase, Mich., is shipping maple logs in the rough to Glasgow, Scotland, to be used as rollers in the extensive paper mills of that city.

THE lumber receipts in Chicago for the year 1884, as compared with those for 1883, show a decrease of 95,093,000 feet of lumber and 289,523,000 pieces of shingles.

THE collections of woods being gathered at Minneapolis to be sent to the New Orleans Exposition will include forty-two samples of as many different kinds of woods grown in Minnesota.

THE Muskegon booming company started from Houghton Lake July 1, with 675,000,000 feet of logs and succeeded in getting them to Muskegon before the season closed, with the exception of a half mile jam.

SOME western gentlemen recently bought 57,000 acres in Butler and Crenshaw counties, Alabama. They will, it is said, establish large mills for the manufacture of pine into timber for "hardwood decorations."

THE Muskegon Boom Company run through their booms the past season 6,011,576 logs, which measured 685,000,000 feet. There are about 5,000,000 feet of logs in the stream within boom limits, and about 50,000,000 in shore booms.

THE lumber shipments from Chicago for the year 1884 foot up 1,833,000,000 feet, showing a decrease of 73,592,356 feet from last year. The shingle shipments have amounted to 1,050,000,000 pieces, showing an increase of 21,026,000 pieces over last year.

MR. S. S. FRAZER, a prominent lumberman of White county, says the *Southern Lumberman*, recently cut and delivered to the mill of Messrs. Kenzie & Butler, on Caney Fork, probably the largest poplar tree on record. It measured 84 inches in diameter at the stump and produced 22,000 feet of lumber.

SWAMP chestnut oak is said to be common in the maritime parts of the Southern States, and is met with in the rich soils of the river swamps. It attains a height of 80 or 90 feet and with a proportional diameter, a straight trunk and large tufted summit it forms a beautiful and majestic tree. The timber has strength and durability, and is therefore employed for various purposes.

BOSWORTH & REILLY, of Stevens Point, Wis., already have a crew of about thirty men at their camp near Otter Rapids, where they will bank about 9,000,000 feet. Dave Robarts will also put in about 1,500,000 feet for them at Mosinee. They have a sufficient stock left over, in their own and the company's boom, to enable them to start their mill in the early spring, without waiting for this winter's cut to get down.

THE aggregate lumber and shingle shipments from the Saginaw river for the years named are as follows:

LUMBER.		SHINGLES.	
1880	769,573,000	1880	168,145,400
1881	832,055,939	1881	149,816,000
1882	858,344,000	1882	176,376,500
1883	778,702,067	1883	164,082,000
1884	734,829,460	1884	154,293,000

Our Illustrations.

Details and plans for two houses to cost $2,300 and $2,800.

Club House, Atlanta, Georgia. Fay & Echberg, architects, Atlanta.

Remodeling of residence for Edmund Burke, Esq., at Lake Geneva, Wis. John Addison, architect, Chicago. The house is 80 by 76, frame, and the improvement will cost about $8,000.

Remodeled dwelling at Lake Forest, Ills., for H. C. Durand, Esq., by S. M. Randolph, architect, Chicago. This house is situated in a fine park and could not be moved off its site without damage to the surroundings. It was built twenty years ago and is in excellent preservation, with substantial foundation, modern sewage system, etc. It had been enlarged and improved recently and was heated by steam. Much expensive work would be destroyed if the whole was torn down. The work of remodeling was begun in the fall and will be so far advanced by spring as not to injure the grounds. In the old plan the kitchen was in the basement below the back parlor, and the laundry was below the sitting-room; the new plan places the kitchen on the main floor and the laundry below it. The remodeled house will be almost as satisfactory as a new one could be, and although much larger, the change in sizes of openings and intervals will improve the proportions, making the new design seem more homelike, less pretentious, and not larger.

New Publications.

THE SMITH & ANTHONY STOVE COMPANY, 52 and 54 Union street, Boston, Mass., issues a handsome illustrated catalogue of its "Hub" stoves and ranges. Some of the cuts in this work are remarkably fine specimens of the engraver's art, especially the panel designs on pages 44 and 45. The letter-press is also good, and the book is highly creditable to the enterprise of its publishers.

PICTURESQUE SKETCHES, comprising Architectural Sculpture, Statues, Monuments, Tombs, Fountains, Capitols, Cathedrals, Iron-work, Details of Ornament, etc., 26 sheets, one hundred and seventy-five cuts. Price, $1.50. JAMES R. OSGOOD & Co. Boston, Publishers.

This envelope of sketches affords at a nominal cost innumerable hints to designers on a variety of subjects. The cuts are handsomely printed on heavy, strong paper, which adapts them for the every day use of the drafting room. They are selections from the initial sketches which have been a pleasing feature of articles in *The American Architect*, but their new form gives them a more effective reproduction, and their convenient arrangement and classification adds greatly to their value and usefulness. The work merits a large sale as it furnishes to architects more good designs than any publication we know of for anything like the price.

TEXT BOOK OF VAULT CONSTRUCTION and How to Improve Valuable Business Property in San Francisco and Other Cities of the United States. Published by P. H. JACKSON & Co., San Francisco, California.

Although this volume is published with special reference to the needs and purposes of San Francisco, it is full of practical suggestions for the improvement of every large city. It contains one hundred and fifty-five pages of text and forty-five full-page cuts, diagrams, etc., and is exceptionally well engraved and printed. It treats of improved building construction, for room, light and ventilation of basements, and upon all the different uses of artificial stone, cement, iron, illuminating, tiling, etc., for the perfect construction of roomy, well-lighted and pleasant basements and underground streets. Illustrative of this, it is simply necessary to quote a paragraph from the text, which will give the entire subject in a nut-shell. The writer says: "In the next twenty years, for new, first-class edifices, the value of room and light in the basement will be so regarded that but few basement piers will be used nearer than from twenty to twenty-five feet apart, as they not only shut out light to the rear like a semi-wall, but also divide the basement part, under the building, from the basement extension beneath the sidewalk. Building construction should keep pace with the advance made in engineering science, as in the construction of railway bridges now being erected all over the civilized world, of great span, over rapid streams liable to floods, and subjected to the most severe usage by rapid travel of express trains." A close inspection of the work would convince the reader that the rules laid down, and the suggestions made, are applicable to almost any city in the union, and this work is extremely creditable to the enterprising firm whose name appears upon its title page. As it is more exhaustive and practical than any work yet published upon the subject, it should be placed in the libraries of architects generally. It can probably be secured upon application.

ILLLUSTRATED CATALOGUE OF THE BOSTON TERRA-COTTA COMPANY, Manufacturers of Architectural and Decorative Terra-Cotta: Catalogue Part V.

"Not fashioned out of gold, like Hero's throne,
Not forged of iron, like the thunderbolts
Of Zeus omnipotent, or like other works
Wrought by my hands at Lemnos or Olympus,
But molded in soft clay, that unresisting
Yields itself to the touch, this lovely form
Before me stands, perfect in every part."

—*Longfellow's "Masque of Pandora."*

It is with this apt and suggestive quotation that one of the richest and most attractive of the many attractive catalogues the terra-cotta industry has given to the public makes its architectural bow and opens its ninety odd beautifully engraved and printed pages to the critical inspection of the architectural profession. The arrangement of this catalogue calls for something more than incidental mention. Commencing with what might be termed references, eight full pages are given to a list of buildings located in all parts of the United States, in which may be seen samples of the work produced by this company and in each case making mention of the name of the architect of the building These are followed by about fifty plates illustrative of the company's product in the line of crestings, finials and terminals, belt courses and moldings, tiles and panels, etc., followed by several exquisite samples of medallions in profile or high relief, represented in buff terra-cotta surrounded by paneling in red terra-cotta and then a succession of pages is given to umbrella holders, decorative vases, garden vases, pedestals, etc., etc. Perspectives of many of the more prominent buildings containing the work of this terra-cotta firm are given while special illustration is made of the beautifully designed terra-cotta mantels that have been one of their most artistic productions. Accurately drawn and engraved we find the sculptured frieze placed by this company around the top of first story of the government pension building at Washington. It represents infantry, cavalry and artillery upon the march, and is life-like in drawing and execution. The frontispiece of the volume illustrates the company's office building in perspective, and gives front and sectional views of the kilns in use stating that the first of their kind was built in Chicago by the company's superintendent, Mr. James Taylor, in 1871, for the use of the now extinct Chicago Terra-Cotta Company. This catalogue must be seen to be appreciated, and in its artistic arrangement, its methodical division of subjects and its convenience it gives equal pleasure with the beauty of the designs illustrated. It is printed upon heavy paper, only one side of each sheet being used and is typographically a splendid specimen of the art preservative. The designs are by Wm. T. Oliver, the engraving is executed by the Lewis Engraving Company, and the printing by P. H. Foster & Co., all of Boston. Architects should have this catalogue in their libraries; as a reference in the designing of terra cotta ornamentation it is invaluable.

Mosaics.

ARCHITECT A. DRUIDING, formerly of St. Louis, has located in Chicago at room 55, Metropolitan Block, retaining a branch office in St. Louis.

MESSRS. KNISLY & MILLER are making an excellent galvanized iron radiator cover for protecting walls, etc. It is furnished plain or painted or japanned.

THE Maller building is now showing the high quality possessed by the Harris Bros' brick. This is the first large structure faced with these Ohio brick that are worthy of gaining in favor as well as in use.

THE Hecla Iron Works of New York, represented in Chicago and the West by Healy & Millet, have sent out some "fireproof" mantels. The material is cast-iron molded in artistic designs and ornamented by brass and nickel-plate.

THE Illinois Terra-Cotta Lumber Company is a corporation formed for the production of all kinds of structural and ornamental terra-cotta. The company will commence manufacturing in Milwaukee and Chicago in March. D. M. Babcock represents the new company.

F. S. ALLEN, the architect of the new Immaculate Conception Church, of Streator, Ills., was recently presented with a beautiful gold medal by the Rev. Father O'Kelly, as a token of his appreciation of Mr. Allen's services, the church having been built under the architect's estimates and without extra cost from the original contracts. The engraving represents the arch of Titus and the three remaining columns of the Temple of Vespasin, at Rome, with appropriate inscriptions.

THAT excellent journal of the mechanical arts, the *Western Manufacturer*, in its December edition gives an exhaustive article upon the history and present condition of the Chicago Manual Training School for boys, accompanied with a well executed wood cut of the building. This journal is one of the best edited and typographically pleasing journals of its class, and is noticeably increasing in excellence in these respects from month to month. It has just completed its twelfth year.

A DRAUGHTSMAN'S curve ruler has been placed on the market by Frank W. Davenport, of Providence, R. I., which, on inspection, seems to be extremely valuable for the purposes intended. It is designed to supplement the French curves in general use and combines every curve in one; is instantly adjusted, the retaining power being in a strip of pure drawn lead which slides between two ribbons of tempered steel. The length of the working edge is ten inches. The price is $1.50.

A RECENT edition (December 27th) of the Omaha *Excelsior*, a society and literary journal of the first water, gives a page to illustration and description of prominent Omaha residences. It is such enterprise as this that most largely aids in the upbuilding of cities, and their consequent prosperity is in like proportion due to their enterprise in giving to the outside world a correct exhibition of the city's beauties. This journal also gives the speech of Architect Sidney Smith, delivered at the Western Association banquet, thus not only showing that Omaha architects are expert in designing, but adepts in social observances.

CALENDARS are being issued by leading material houses that are extremely tasteful in design and rich in effect; almost a certain indication of the standing and enterprise of a house is found in the appearance of these yearly visitors. Among many others received those of Merchant & Co., of Philadelphia, the lithographic work of which is exceedingly well executed, the Dearborn Foundry, of Chicago, which is very similar in style, and that issued by Henry Lord Gay's permanent exhibit and exchange, Chicago, a very chaste and artistic card, are the best. Two of these calendars were received from Merchant & Co, and one has already been "borrowed" by some unknown admirer.

ARTIFICIAL paving blocks are being made with considerable success and with many points of practical utility, by the Haydenville Mining and Manufacturing Co., of Haydenville, Ohio. The blocks are made square, with vertical sides and flat surface broken by indentations to secure a firm footing for horses. The outer edges of the block at the top are slightly beveled, so as to readily admit a filling of sand, pitch or other material, and affording a perfect surface for drainage. These blocks should be very durable, being made of fire clay and other materials vitrified to the hardness of granite. Each block is provided with a hollow chamber beneath, which fills with the sand of which the road-bed is constructed and gives an elastic surface to the pavement. As these blocks are water-proof their hardness is permanent.

THE improvement in the quality of gas in Chicago has been great in the past two years, and the demand for fixtures that would utilize its lighting capacity has been correspondingly great. As in the past century crystal prisms were used to increase the brilliancy of the candles and oil lamps then used, so has the antique and glittering prism been made to at once lend an old world feeling to the hall or parlor, and to fully utilize the brilliant gas jet. As the ancient workers in brass and copper sought to form into fantastic shapes these metals for the reception of light giving candelabra, so have the modern manufacturers sought to skillfully imitate, yet improve upon their designs, and an artistic as well as physical pleasure, is properly given to the light dispensing medium. The unique and the antique are synonymous, and recognizing this and the popular taste for ancient forms has led to the closest study of the subject by those whose province it is to cater to the public taste, notably the Archer & Pancoast Manufacturing Company, whose Chicago branch, under the management of Mr. H. G. Willard, is an exponent of the height to which this great art has been carried. One need but to walk through their richly carpeted and decorated show rooms to be filled with wonder at the handicraft of man, and see how the centuries of the past are sitting at the feet of the modern artist, giving him encouragement and fame, while our homes are enriched by the product of his skill.

Inventive Genius in Building.

307,985. Safety-Attachment for Elevators. John D. Phyfe, Demarest, and James J. Harold, Tenfly, N. J.
307,998. Hydraulic Elevator. Jonathan Smith, Toledo, O.
308,005. Scaffold-Clamp. Henry Steinebrei, Brooklyn, N. Y.
308,010. Elevator-Attachment. George W. Thomas, Baltimore, Md.
308,039. Steam-Heater. John F. Pease, Syracuse, N. Y.
308,040. Drawing-Board and T-Square. Clifford H Prescott, Lawrence, Mass.
308,614. Hot-Air Furnace. George Kamp, Utica, N. Y.
308,656. Opera-Chair. John Du Bois, Duhois, Pa.
308,678. Alarm-Lock. Jacob W. Kohn, Newark, N. J.
308,698. Shutter-Worker. Edwin Prescott, Arlington, Mass.
308,710. Tile-Machine. John S. Smith, Jackson, Mich.
308,742. Coal-Chute and Vault-Cover. Harold Borup, St. Paul, Minn.
308,773. Sash-Balance. W. Haskell King, Athol, Mass.
308,812. Attachment for Knob-Roses. Garrett Van Winkle, North Plainfield, N. J.
308,820. Combined Anvil and Vise. Joseph Austin, Rutland, Vt.
308,825-826. Structural Shape for Columns, Pilasters, etc. Edward M. Butz, Allegheny, Pa.
308,827. Metal Column, Pilaster or Girder Edward M. Butz, Allegheny, Pa.
308,828. Structural Shape for Columns, Pilasters and Girders. Edward M. Butz, Allegheny, Pa.
308,829. Metal Column, Pilaster or Girder. Edward M. Butz, Allegheny, Pa.
308,833. Portable Structure. John G. C. Döcker, Copenhagen, Denmark.
308,885. Lock. George M. Eames and Freeland W. Ostrum, Bridgeport, Conn.
308,927. Water-Heater for Stoves, Ranges, etc. John A. Price, Scranton, Pa.
308,935. Water-Closet and Similar Structures. Henry C. Weeden, Boston, Mass.
308,936. Guard for Elevator-Shafts. Charles Whittier, Boston, Mass.
308,947. Rock-Drilling Machine. Bror F. Bergh, New York, N. Y.
308,964. Fastening for Meeting-Rails of Sashes. Horace L. Heaton, Indianapolis, Ind.
308,973. Calcemine Composition and Method of Preparing the Same. George A. Marsh, Jr., Sandusky, O.
309,021. Machine for Framing Timber. Wm. S. Bley, Silver King, Ariz.
309,024. Window Blind or Shutter. Melancton B. Bristol and Orange A. Page Oskaloosa, Ia.
309,030. Portable Dry-Dock or Coffer-Dam. Frank Cox, Philadelphia, Pa.
309,037. Brick-Machine. Charles A. Tarragon, Portland, Oreg.
309,038. Scaffold-Clamp. Arthur B. Flach, New York, N. Y.
309,059. Shutter Fastener. Bernhard Jacob, Selma, Ala.
309,300. Sash-Holder. James F. Hamilton, Connersville, Ind.
309,330. Self-Closing Hatchway. Philip V. Bail, Cowden, Ill.
309,339. Planing and Matching Machine. Wm M. Dwight, Detroit, Mich.
309,363. Apparatus for Painting Wire-Screens. Chas. J. Shipley, Detroit, Mich.
309,367. Brick-Machine. Joel Tiffany, Hinsdale, Ill.
309,393. Hinge. John H. Lawrence, Sterling, Ill.
309,395. Trap. Ezra S. McClellan, Paterson, N. J.
309,436. Boiler for Heating Purposes. Henry Burt, Danforth, N. Y.
309,449. Elevator. Walter L. Folstead, Richmond, Va.
309,459. Metallic Roofing. Millard F. Hamsley, Nashville, Tenn.
309,472. Roofing-Machine. Henry A. Leher, Cape Girardeau, Mo.
309,490. Fire and Water Proof Roofing-Paint. Charles H. Phillips and Wallace M. Taylor, Alpena, Mich.
309,495. Hot-Air Furnace. David McCreary Russell, Washington, D. C.
309,538. Screw-Elevator. Lorenzo S. Graves, Rochester, N. Y.
309,549. Brick-Machine. Joseph J. Kulage, St. Louis, Mo.
309,551. Tin-Seaming Machine. William A. List, Wheeling, W. Va.
309,568. Roofing-Tile and Apparatus for the Manufacture thereof. Carl Schlickeysen, Berlin, Germany.
309,586. Artificial Stone or Building-Block and Process of Making the Same. Otto J. E. Vogelbach and John Christian Wieland, Philadelphia, Pa.
309,589. Brick-Machine. Geo. J. Weber, Boonville, Mo.
309,599. Transom-Lifter. Augustus R. Brand, Philadelphia, Pa.
309,601. Combined Door-Knob and Button. Mary Broughton, Brooklyn, N. Y.
309,063. Girder. Charles H. Kellogg, Buffalo, N. Y.
309,070. Panel and Wood Trimming. Frederick Mankey, Williamsport, Pa.
309,071. Surface-Cut Lumber and Process of making the same. Frederick Mankey, Williamsport, Pa.
309,076. Fire-Shield for Roofs, etc. Jas. McCarroll, New York, N. Y.
309,084. Wrench. Frederick G. Osborn, Newark, N. J.
309,094. Sash-Fastener. Jonathan D. Price, Cherokee, Ia.
309,097. Fire-Escape. Marcus H. Robb, Oak Ridge, Mo.
309,104-105. Spring-Hinge. John H. Shaw, New Haven, Conn.
309,113. Sheet-Metal Roofing-Plate. John Walter, Nashville, Tenn.
309,115. School Desk and Seat. Henry Weber, Waterbury, Conn.
309,134. Metal Roofing-Plate. Charles B. Cooper, New York, N. Y.
309,141. Fire-Escape. Israel F. Good, New Village, N. J.
309,149. Fire-Escape. John R. Koons, Huntington Mills, Pa.
309,150. Art of Manufacturing Portland Cement. E. F. Loiseau, Philadelphia, Pa.
309,153. File and Holder. George J. Murdoch, Brooklyn, N. Y.
309,181. Lock. Rudolf E. Woodrich, New York, and Charles Langbein, Brooklyn, N. Y.
309,183. Heat-Regulator. Harris W. Axford, Chicago, Ill.
309,186. Brick-Mold Sanding Machine. Michael and Jacob Bierline, Chaska, Minn.
309,206. Lathe-Check. Austin F. Cushman, Hartford, Conn.
309,226. Smoke-Consuming Furnace. James W. Hueber, San Francisco, Cal.
309,237. Screw-Cutting Die. Frederick D. Mayo, Lynn, Mass.
309,247. Joint for Lead Pipes. William R. Patterson, Chicago, Ill.
309,250. Manufacture of Highly Refractory Silica Brick. Isaac Reese, Pittsburgh, Pa.
309,270. Plant for and Process of Making Lime. Samuel T. Wellman and George W. Goetz, Cleveland, O.
309,276. Bit-Holder. Hezekiah Wilson, Kingston, Pa.
309,280-281. Soldering-Iron. August F Zimmerling, Milwaukee, Wis.
309,282. Steam-Generator. Benjamin T. Babbitt, New York, N. Y.

Synopsis of Building News.

Albuquerque, N.M.—Building outlook not very good, but is expected it will improve as the season advances.

Architect J. B. Randall reports: For Territory of New Mexico, east wing of Territorial Capitol Building, full cut stone fronts, four stories high, 156 by 117 feet, slate roof, composite style of architecture, cost $200,000; to be erected at Sante Fe. Contracts awarded Jan. 1. For Hon. F. Lund, two-story brick dwelling, 50 by 75 feet, metal roof, shape, broken, seven angles, cost $10,000; nearly finished; J. M. Scott, builder. For County of Servid, two-story brick court-house, 75 by 98 feet, metal roof, Queen Anne, style; cost $23,000; to be commenced this month. For Albuquerque Hotel and Opera House Co., three-story brick hotel building, 96 by 125 feet, cost $75,000; nearly finished; Edward Medler, builder.

Austin, Tex.—Present condition rather dull, outlook fair.

Architects J. N. Preston & Son report: For Bell county, three-story stone court-house, 129 by 102 feet, cost $72,000; walls up; Ben D. Lee, builder. For Washington county, three-story brick court-house, 84 by 127 feet, cost $58,000; roof on; Waite & Gardiner, builders. For J. L. Driskill, four-story brick hotel, 150 by 170 feet, cost $220,000; not yet commenced. For Rev. E. B. Wright, two-story frame residence, 40 by 60 feet, cost $5,500; roof on; A. Gardiner & Co., builders. For State of Texas, North Texas Insane Asylum at Terrell, three-story brick building, 348 by 150 feet, cost $180,000; finishing; John McDonald, of Austin, builder. For San Saba county, two-story stone jail building, 42 by 62 feet, cost $16,400; walls up; Starr & Co., of St. Louis, Mo., builders.

Alexandria, La.—The Board of Administrators of the Alexandria City Hospital, lately appointed by the governor, selected the following named gentlemen as officers, viz.: M. C. Mosely, president; Julius Levin, vice-president; Miles Rosenthal, secretary and treasurer. The treasurer is required to give bond in the sum of $10,000. At the meeting of the last legislature of this state the sum of $10,000 was appropriated to build the hospital. The location of a site has not yet been decided on, although it is thought that it will be put up on the outer edge of this town. Work will shortly commence on the same.

Anoka, Minn.—Since the fire August 16, upwards of thirty brick and permanent frame buildings have been erected in the burnt district at an aggregate cost of $349,000. In addition to this about one hundred dwelling-houses have been built, costing about $1,000 each. The Northern Pacific R. R. has erected a handsome new depot, and other local improvements are apparent in almost all directions. On Sept. 1 the large iron wagon bridge over the Mississippi river was completed at a cost of $75,000. The Northern Pacific bridge over the Rum river has also been completed at a cost of $30,000. The phenomenal growth of the city is a gratifying indication of the interest which all its inhabitants take in local improvement.

Chicago.—The first of the year brought such unexpected reports upon the business situation, and particularly in the line of building, that the prospect of a large amount of work in this line for the coming year is assured.

The owners and agents of large office buildings are actively engaged in securing tenants for their buildings. The renting is all estimated by the square foot, and ranges from $1.50 to $2.50, the latter being the price received for a large portion of Pullman's office building. One of the most important transfers of real estate is the purchase from C. M. Henderson by Conrad Furst of a lot 166 feet front on Franklin street, running from Jackson to Quincy street, for $155,000. The lot is 105 feet deep, and it is the purchaser's purpose to erect one of the finest factory buildings in the country.

The remodeling of McVicker's Theater, plans for which were first drawn by Architects Adler and Sullivan, in the spring of 1883, is about to be carried out under the completed plans of these architects. This will consist of the addition of two stories to the front, which will be fitted up for office purposes, with elevators, etc., and a thorough remodeling of the theater, the plans showing one of the best arranged theaters yet built.

At a meeting of the directors of the Builders' and Traders' Exchange on the 5th instant a most prosperous condition was shown by the report of the secretary. A library is about to be started for the use of the members, and other movements are contemplated by the secretary toward making this the first builders' society in the country. The library should receive the earnest support of every builder. The annual meeting will occur on the 19th instant.

Architects Wheelock & Clay report: For James M. Love, twelve two-story stone front brick dwelling-houses, 200 by 65 feet, cost $54,000; under way; Wm. Goldie carpenter; Wm. Guelsdorff, mason. For Indiana Club, one-story brick addition to club-house, 24 by 107 feet, cost $4,000; under way. For City of Freeport, Ills., three-story brick high school building, 98 by 98 feet, cost, $25,000; bids just taken.

Architect C. L. Stiles reports: For Geo. B. Cornell, two-story and cellar residence, 45 by 65 feet, on Park avenue near Leavitt street, rock-faced stone basement, Anderson pressed brick with Bedford stone trimmings, cost $12,000; up to second story; James O'Connell, mason; F. P. Nelson, carpenter. For Russell Bros., three-story and cellar, stores and tenements, 44 by 56 feet, on West Van Buren near Leavitt street, Anderson pressed brick and terra cotta trimmings, cost $11,000; bids open, and work will be commenced as soon as weather will permit. For James Donnely, seven two-story houses, each 24 by 56 feet, on Ashland avenue and Taylor street, Anderson pressed brick, with stone and terra cotta trimmings, cost $30,000; bids open and work will be commenced as soon as weather will permit. For A. Hobert, at Woodlawn, two-story frame residence, 24 by 50 feet, cost $3,000; drawings nearly finished. For H. L. Borden & Co., two two-story and cellar houses, 44 by 55 feet, on Ashland avenue near Carroll avenue, Indiana pressed brick with stone trimmings, cost $7,500; ready for plastering.

Architect George S. Spohr reports: For J. M. Walker, two-story, cellar and attic building, 24 by 60 feet, Anderson pressed brick, with brown stone trimmings, cost $5,000; Maher & Provost, masons; Sam. Piggott, carpenter. For M. Kaufman, two-story cellar and attic double house, 35 by 75 feet, Anderson molded brick and brown stone trimmings, cost $15,000; Geo. Frank, mason; Chas. Rhode, carpenter. Also barn, 28 by 35 feet, cost $1,500. For Geo. Turnis, two story and cellar and attic pressed brick residence, 25 by 60 feet, cost $6,000. For Mrs. Wood, two-story and cellar and attic frame residence, 32 by 60 feet, at Lake View, cost $8,000.

Architect August Bessler reports: For Andrew Delp, one-story and basement and attic cottage, 20 by 54 feet, on California avenue, near Ogden avenue, Indiana pressed brick, with stone trimmings, slate roof, cost $2,400; under way. For Joseph Danginger, two-story and basement dwelling house, 22 by 66 feet, on Western avenue, near Twelfth street, pressed brick front, with stone trimmings, cost $4,000; under way.

Architect Henry T. Kley reports: For Peter Schoenhofen Brewing Co., public hall building, 115 by 100 feet, five stories and basement, Anderson pressed brick, with stone and terra cotta trimmings, cost $60,000; finished; Hansen & Mayor, builders. For Andrew Schulz, three-story and basement stone front stores and flats, 45 by 75 feet, cost $14,000; finished. For M. Cohn, two-story and basement store and flats, 25 by 70 feet, Anderson pressed brick, with stone trimmings, cost $7,000; finished. For H. T. Steinbock, three-story and basement store and flats, 25 by 55 feet, pressed brick, with terra cotta trimmings, cost $6,800; under way; Fred Hansen & Co., builders. For F. Kristan, three-story store and flats, 25 by 75 feet, pressed brick, with stone trimmings, cost $9,200; finished; M. Sase, builder. For Theo. Witt, three-story store and flats, 25 by 75 feet, pressed brick, with terra cotta trimmings, cost $8,000; under way. For Town of Jefferson, three-story and basement school building, 48 by 56 feet, pressed brick, with stone trimmings, cost $8,000; under way. For F. Haase, four-story and basement building, 25 by 80 feet, pressed brick, with stone trimmings; also barn, cost $14,000, finished. For F. Ringler, two three-story and basement store buildings, 48 by 100 feet, pressed brick, with stone trimmings, cost $16,000; Fred Hansen & Co., builders.

An architect who fails to give his name, reports: For F. Reuss, two three-story and basement store buildings, 50 by 80 feet, cost $25,000; being figured. For F. Homan, two three-story and basement store buildings, 50 by 80 feet, cost $25,000; being figured. For Wm. Weiner, two-story and basement residence, 21 by 56 feet, cost $6,000; under way.

Architect S. S. Beman has designed three houses for Halsted Burnet, of St. Louis. They are tasteful in style and will cost about $5,000 each. The Murphy Varnish Company's building at St. Louis is nearly completed. The plans were drawn by Mr. Beman, and the construction progressed under the supervision of the late architect, Jungenfeld. It will cost about $25,000.

Architect W. L. Carroll reports: For Thomas Mackin, improvements in the Revere House, cost $30,000; also six flat buildings, cost $20,000. For Thos. Hood, four residences, cost $12,500. For H. J. Palmer, six flat buildings, cost $15,000. For Annie L. Gartside, residence, cost $10,000. For S. S. Niles, residence, cost $5,500. For John Cassidy, three stores with flats above, cost $12,000. For Wm. Sibley, two dwellings, cost $2,500. For B. D. West, residence, projected, cost $5,000.

Cleveland, O.—Plans have been completed for the erection of a large music hall. The walls will be of brick, and the structure will consist of only one very high story. The foundation will be very substantially built of stone. The interior will be neatly though not elaborately decorated, and the model will be after that of the music hall on the exhibition grounds at St. Louis. There will be two galleries, and the seats being the regular opera chairs, will admit of a seating capacity of at least four thousand. The ground is larger than that upon which the tabernacle now stands. The new hall will not be owned by any one society and each will have an equal privilege in renting it and using its privileges. It is expected the building will be completed by May next. The cost will be about $30,000.

Cincinnati, O.—The Masonic Temple building in this city was a victim of fire December 24. The building cost $200,000, and was insured for $125,000; the total loss on the building is estimated at $60,000.

Dallas, Tex.—On December 27 the large grain elevator of Rainwater & Stearns, was completely destroyed by fire. Loss $60,000, insurance $30,000.

Des Moines, Ia.—Outlook not very flattering. Building materials are very low and wages quite uncertain.

Architect W. L. Black reports: For Dr. J. W. McDowell, a row of two-story and basement brick tenements, 150 by 38 feet, cost $22,000; contract to be let January 20. For Wm. Montgomery, row of two-story and brick and stone tenements, 88 by 48 feet, cost $11,500; just completed; Frank Collins, builder. For Mrs. T. K. Brooks, two-story brick and stone tenements, 44 by 36 feet, cost $3,500; just completed; John Bagley, mason; G. Anderson, carpenter. For Geo. Sullel, block of two-story and basement brick tenements, 128 by 132 feet, cost $25,000; projected. For Judge Mitchell, two-story frame residence, 28 by 46 feet, cost $3,200; just completed; F. T. Nelson, builder. For Odd-Fellows Lodge, six-story brick and terra cotta business block, with lodge-rooms on upper floors, 42 by 132 feet, cost $60,000; plans submitted. For United States Express Co.,

[*Continued on page xiv.*]

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two-story brick stable and storage rooms, 50 by 80 feet, cost $6,400; just completed; S. A. Robertson, mason; Chas. Langley, carpenter. For Hanny & Miller, one-story brick and stone skating rink, with galleries, 62 by 162 feet, cost $9,200; just completed; Chas. Langley, builder. For Dr. J. Watts, two-story frame residence, 32 by 58 feet, cost $6,000; just finished; H. M. Moore, builder. For Dr. H. W. Dickenson, remodeling residence, cost $2 700; drawings under way; E. G. Kimball, contractor. For J. S. Hockersmith, a restaurant and apartment building, two-story and basement, brick, 44 by 80 feet, cost $5,700; underway; John Bagley, builder. For Episcopal Chapel, one-story brick building, 28 by 50 feet, cost $2,250; underway; Hand & Carter, builders. For Fred. C. McCartney, remodeling residence, cost $2,200; completed. For A. W. Nayler, remodeling residence, cost $3,500. John Bagley, builder.

Detroit, Mich.—Architect A. C. Varney reports: For Emil Heineman, block of six four-story and basement store buildings, stone, brick and iron construction, frontage of 60 feet on Mich. Grand avenue, 150 feet on Bates street and 64 feet on Congress street, cost, $45,000; will be started in the spring. For Thomas A. Wadsworth, on McDougal avenue, two-story brick residence, slate roof; also frame barn, cost of improvement $7,000; under way; Graham & Laferty, masons; Scheibel & Hild, carpenters. For P. McDonald, three-story and mansard double brick dwelling, with sandstone trimmings, corner Elizabeth street and Cass avenue, cost $8,000; under way; Lane & Deitz, masons; Massie & Scoville, carpenters. For Henry T. Loomis, two-story brick dwelling, slate roof, cost $4,500; just started. For Detroit Fishing and Hunting Association, on Star Island, Lake St. Claire, three-story club house, 175 by 40 feet, with two wings, 60 by 30 feet, cost $14,000; to be started in the spring.

Among the permits recently issued are the following: David Wallace, brick addition to his residence, No. 24 West Alexandrine avenue, $4,500. William Scott & Co., for C. C. Hodges, two-story brick dwelling, Woodward avenue, above Bratshaw avenue, $7,200. H. J. Tracy, two-story frame dwelling, Cass avenue, $4,300. Fred Albrect, two-story frame church, Joseph Campau avenue, $3,500. Delbridge, Brooks & Fisher, brick planing mill, Warren avenue, near Fifteenth street, $6,000. J. E. & Geo. H. Scripps, brick, lead and color works, No. 316 Grand River avenue, $3,500.

Eau Claire, Wis.—Preparations will be commenced immediately for rebuilding St. Patrick's Church, which was recently destroyed by fire. The new edifice will probably not cost less than $50,000.

Grand Rapids, Mich.—Architect Sidney J. Osgood reports: For Mr. Whiddicomb, five-story stone and pressed brick office building, 60 by 135 feet, interior finished in hardwood, cost $90,000; finished this season. For a stock company roller rink, brick and stone building, 200 by 125 feet, circle roof in one clear span, cost $15,000. For Mr. Bennett, frame dwelling, cost $6,000; to be commenced in the spring. School-house at Woodland, Mich., cost $4,000; contract let December 1.

An architect who does not give his name or address reports: For Thos. Williams, two-story brick dwelling, 22 by 42 feet, cost $3,000; under way. For Mr. Conklin, at Battle Creek, Mich., one and one-half story modern frame cottage; projected. Portland Avenue S. S. Chapel, etc., 40 by 98 feet, cost $4,000; projected.

Grand Forks, Dak.—Architect Richard Marston reports: For Trepainn Bros., two-story brick building, 24 by 60 feet, cost $5,000; under way; John Bartholmew, builder. Just completed an addition to the University of North Dakota, 30 by 50 feet. All outside work is done for the winter. Very little inside work to be done.

Green Bay, Wis.—Architect J. McDonnell reports the following for 1884: For Rt. Rev. Bishop Haautlain, two-story brick and stone school building, 54 by 60 feet, cost $8,000; completed. For Catholic at Manistique, Mich., wood and stone church building, 75 by 38 feet, cost $3,600; under way. For Ontonogan county, Mich., court-house, 75 by 62 feet, two stories and basement, brick and Marquette sandstone, tile floors and slate roof, cost $23,000; under way; C. A. Newell, of Green Bay, builder. For George G. Green, two-story and basement frame dwelling, 62 by 38 feet, cost not estimated; under way; C. Schwerz, builder. For G. A. Husterman, two-story and basement and attic frame dwelling, 34 by 76 feet, plans completed and being figured. For Belrusen & Emigh, block of two-story brick and stone stores, 45 by 90 feet, cost $8,000; completed; E. L. Kendall, builder. For Board of Education, alterations and repairs in school buildings, cost $2,300. For Ballering Bros., Kewanee, two-story and basement brick and stone store building, 34 by 90 feet, cost $5,200; completed. Small buildings, aggregating $3,300.

Hannibal, Mo.—Architect Jas. Oliver Hogg reports: For John James, at New London, store building, 60 by 90 feet, cost $4,000; under way. For W. H. Johnson, two store buildings, 20 by 60 feet, cost $3,000; contract not let. For Mr. Buchanan at New London, two-story hotel building, 38 by 60 feet, cost $4,000; contract let; B. F. Gresham, builder. Also just started two store buildings, to cost $1,800 each.

Illinois Corporations.—The following new corporations were recently licensed by the secretary of state: The Illinois Terra Cotta Lumber Company, which proposes to manufacture lumber for fire-proofing purposes in Chicago, from clay and sawdust; capital, $100,000; incorporators, Dwight M. Babcock, W. A. Lincoln and W. E. Barrows. The Norway Pulp Company, to manufacture wood pulp in Chicago; capital stock, $30,000; incorporators, Albert Reynolds, W. M. Bolles and Charles F. Smith.

Indianapolis, Ind.—Architects Hodgson, Wallingford & Stein report: Everything quiet now. Fair spring outlook. For the Berkshire Life Ins. Co., store buildings, to cost $15,000; projected. For James M. Ken, residence at Columbus, O., cost $5,000; projected. For A. M. Andrews, residence at Connorsville, Ind., cost $3,000; projected. For W. Hasselman, residence at Indianapolis, cost $3,000; projected. For G. W. Wesley, a stable at Cleveland, cost $3,000. For John Cadnallade, residence at Indianapolis, cost $3,500; contracted; W. Whitman, builder.

Joliet, Ill.—Architect Julian Barnes reports: For Mrs. Thayer, at Jacksonville, Fla., two-story frame dwelling, 28 by 53 feet, cost $5,000. For Mr. Oliver McCool, at Freeport, Ill., two-story frame dwelling, 26 by 38 feet, cost $2.500; contract not let. For W. V. Montgomery, two-story frame dwelling, 24 by 32 feet, wing 18 by 22 feet, cost $2,600; contract not let. For F. M. Hawk, two frame cottages, 24 by 38 feet, cost $1,500; nearly finished; John Gunlock, builder.

Kansas City, Mo.—Present condition is not good, but prospects of a good spring season are flattering.

Architect L. L. Levering reports: For John Raynor, two-story brick dwelling, 20 by 52 feet, cost $2,500; under contract. For John Raynor, three-story, fourteen-room, brick, slate and stone residence, 45 by 54 feet, cost $9,500; projected for early spring. For Samuel Murdy, one and one-half story and attic frame cottage, 40 by 42 feet, cost $1,300; under way.

Architect Wm. Nier, reports: For Cable Railway Co., engine and car house, stone and brick, three-stories high, 90 by 144 feet, cost $55,000; just completed. For James Morrison & Co., two-story stone, brick and iron fire-proof building, 44 by 41 feet, cost $4,500; under way; James Dowling and Ed. Caples, builders. For James Morrison & Co., two-story stone and brick addition to packing-house, 57 by 155 feet, cost $15,000; contract not let. For J. W. Nier, two-story brick and stone residence, 22 by 37; cost $3,500; ready for bids. For J. L. Downs & Co., Sewer Pipe Works, three-story brick and stone building, 87 by 250 feet, cost $20,000; bids taken for 90 days.

The North, Orrison & Co., furniture store, this city, was destroyed by fire December 27, and the adjoining building, occupied by Wolf Bros, dealers in general furnishing goods, badly scorched and damaged by water. The total loss will exceed $100,000. Both buildings were owned by W. C. Lowbenstein, and insurance $90,400.

Keokuk, Ia.—Building operations have been very brisk at this place for the past summer, but little new work is being projected at the present time. Among the recent improvements is a $10,000 school-house; a dwelling for A. H. Evans, cost $6,000; a residence for L. D. Sheppard, cost $55,000; a frame residence for John D. Perkins, cost $4,600; a residence for Charles Pond, cost $6,000.

Leavenworth, Kan.—Preparations are being made for the erection of the new building for the Kansas Soldiers' Home, to be located near this city. It is said Col. Brown will arrive in Leavenworth early this month and commence the work of laying off the ground and grading preparatory to commencing the building as soon as the weather permits.

Lowell, Mich.—Architect A. W. Rush reports: Building outlook for coming season, good. For Lowell Postoffice Co., two-story brick building, 24 by 80 feet, cost $5,700; nearly inclosed; B. G. Wilson, builder. For Mr. Andrew Lane, two-story brick farm house, township of Berlin, cost $2,800; to be erected in the spring. Also plans on the boards for three buildings to be commenced next month.

Minneapolis, Minn.—The five-story building, formerly known as the Academy of Music, being lately occupied as a store and office building, was destroyed by fire December 25. The gross loss will reach $200,000, with a total insurance of $150,000. Herrick, Lowry & Herrick lose on building $100,000, insurance $60,000. The owners state that the old building will be razed to the ground and a magnificent stone structure, eight or ten stories in height, built on the the site. The old building was not properly constructed, and as a result, the old walls will be torn down. They are not considered safe, and it is the prevailing opinion among architects and builders that as soon as the mass of ice thaws, a goodly portion of the walls will tumble to the ground. The new building will probably cost several hundred thousand dollars. As they had not yet consulted an architect they could give no definite idea of outline or costs.

New Orleans, La.—Architect Thos. Sully reports: For Mr. Maxwell, two public comfort buildings in Exposition Park, 200 by 150 feet each, cost $12,000 each. For Mr. Hamilton, two-story frame dwelling, 28 by 60 feet, cost $4,000: John A. Sicard & Son, builders. For Mr. C. Heyms, brick stable, 20 by 30 feet, cost $2,000; J. R. Truck, builder. For Mr. J. B. Ciers, two-story addition to frame house, 19 by 35 feet, cost $2,500; Mr. Sinder, builder.

North Springfield, Mo.—Dull at present; prospect for spring is good.

Architect A. P. Wright reports: For Viles & Freeman, three-story frame elevator building, 24 by 64 feet, cost $3,400; under way; C. E. Bunker, builder. For J. R. Maupin, two-story brick store building, 20 by 50 feet, cost $2,500; under way; G. W. Thompson, builder. For J. M. Dawling, two-story brick residence, 44 by 64 feet, cost $11,000; projected. For J. M. Dawling, three-story brick store building, 44 by 100 feet, cost $9,000; projected.

Ossian, Iowa.—Architect E. G. Aurand reports: It is somewhat early in this vicinity to write you anything definite concerning the building outlook. I have prepared preliminary sketches for the remodeling, with additions, to a house here, which contemplates an outlay of about $1,800. Am working out sketches for another residence, new, balloon frame, veneered with brick; proposed cost about $2,500. A brick mason here, usually lays front, back and all around; lays stone, cuts stone, sets stone, and finishing up with plaster, sometimes unfortunately outside as well as in. Carpenters are the constructors of the frame, the joiners and stair-builders in one, and occasionally able in all these branches to discount the city specialist. The simplicity of plumbing and steam heating is usually performed by the local tinner. This may be a city, but the inhabitants of this locality have acquired the knowledge, or are acquiring it, that they live under the compulsory law of frugality and economy.

West Bay City, Mich.—Architect D. P. Clark reports: For John Paden, frame roller skating rink, 50 by 100 feet, cost $2,500; completed; Miller Bros., builders. For District No. 2, West Bay City, four-room frame school-house, 60 by 90 feet, cost $5,000; preparing plans. Also remodeling two buildings, and there is some big work in prospect.

Winfield, Kan.—There have been about 125 dwellings built this year, ranging in price from $1,200 to $2,000. Present outlook not flattering.

Architect S. A. Cook reports: For S. H. Myton, two-story store building, 75 by 90 feet, cost $12,000, under way; James Connors, builder. For Curns & Mason, two-story brick store building, 25 by 57 feet, cost $5,000, under way; James Connors, builder. For J. W. Johnston, two-story frame dwelling, 37 by 63 feet, cost $4,500, under way. For N. M. Powers, two-story frame dwelling, 30 by 50 feet, cost $4,000, under way. For Kingman, Kan., Bank, two-story brick bank building, 50 by 100 feet, cost $12,000, under way. School-house at Kingman, Kan., two-story brick building, 70 by 77 feet, cost $13,800, under way. L. C. McCamant, builder.

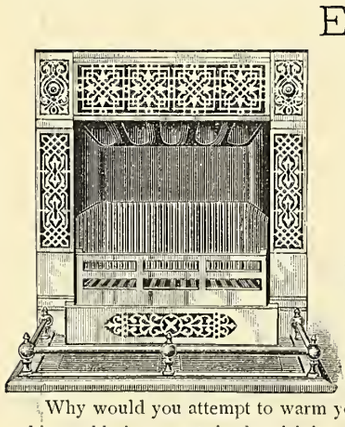
Another architect has on hand, for Chas. Harter, two-story stone store building, 50 by 90 feet, cost $8,000; projected. School-house, t wo-story stone building, 34 by 60 feet, cost $6,400, under way; Warner Bros., builders. Two-story brick and stone store building, 25 by 50 feet, cost $3,500, under way.

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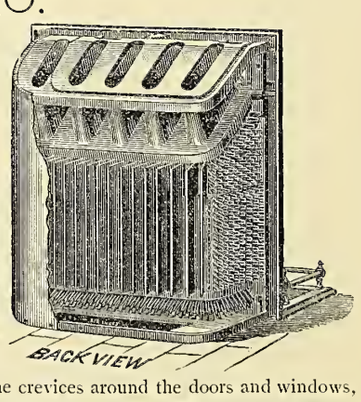
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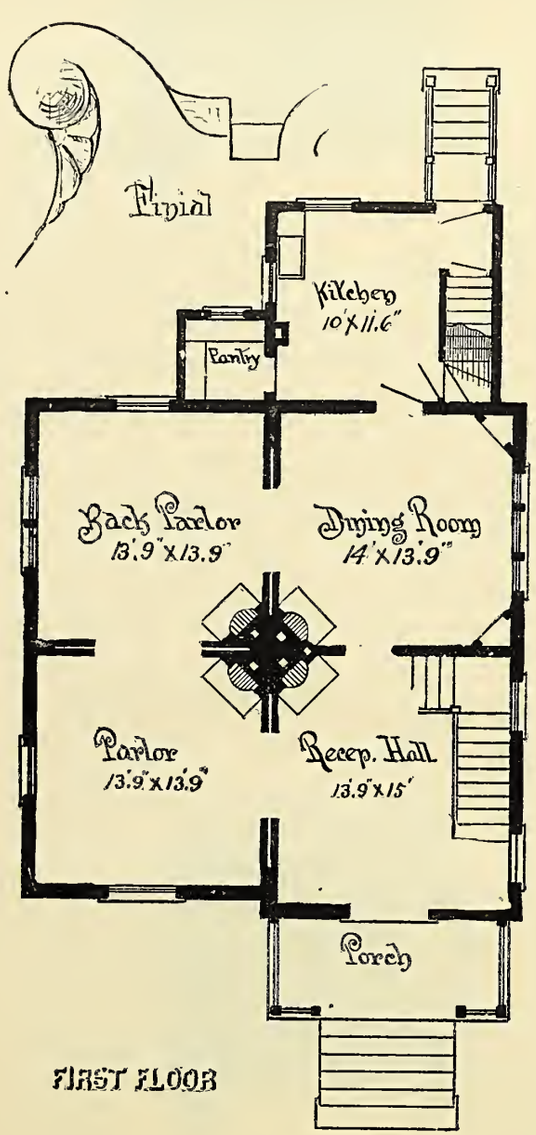


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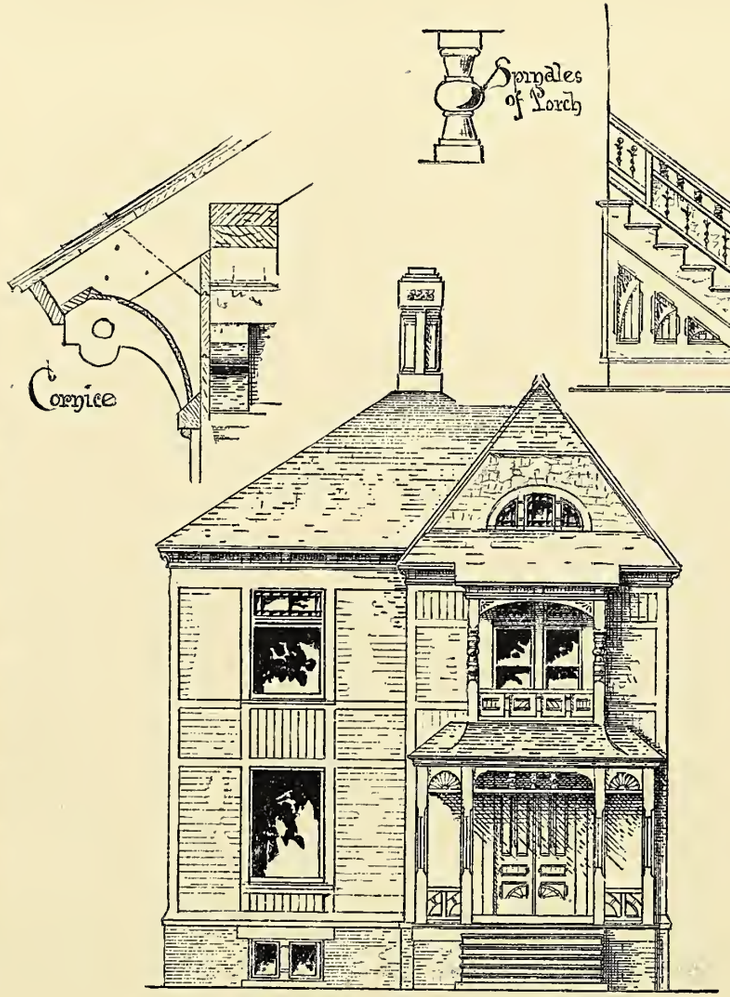


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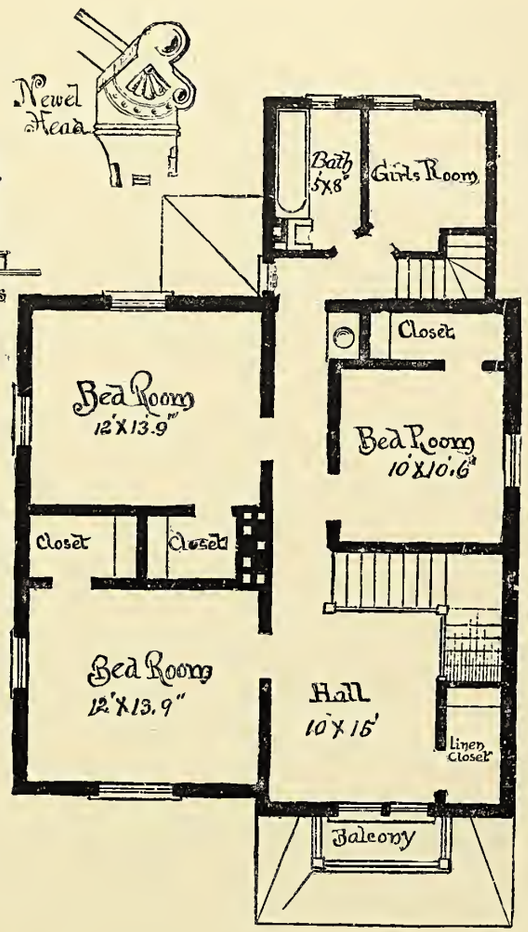


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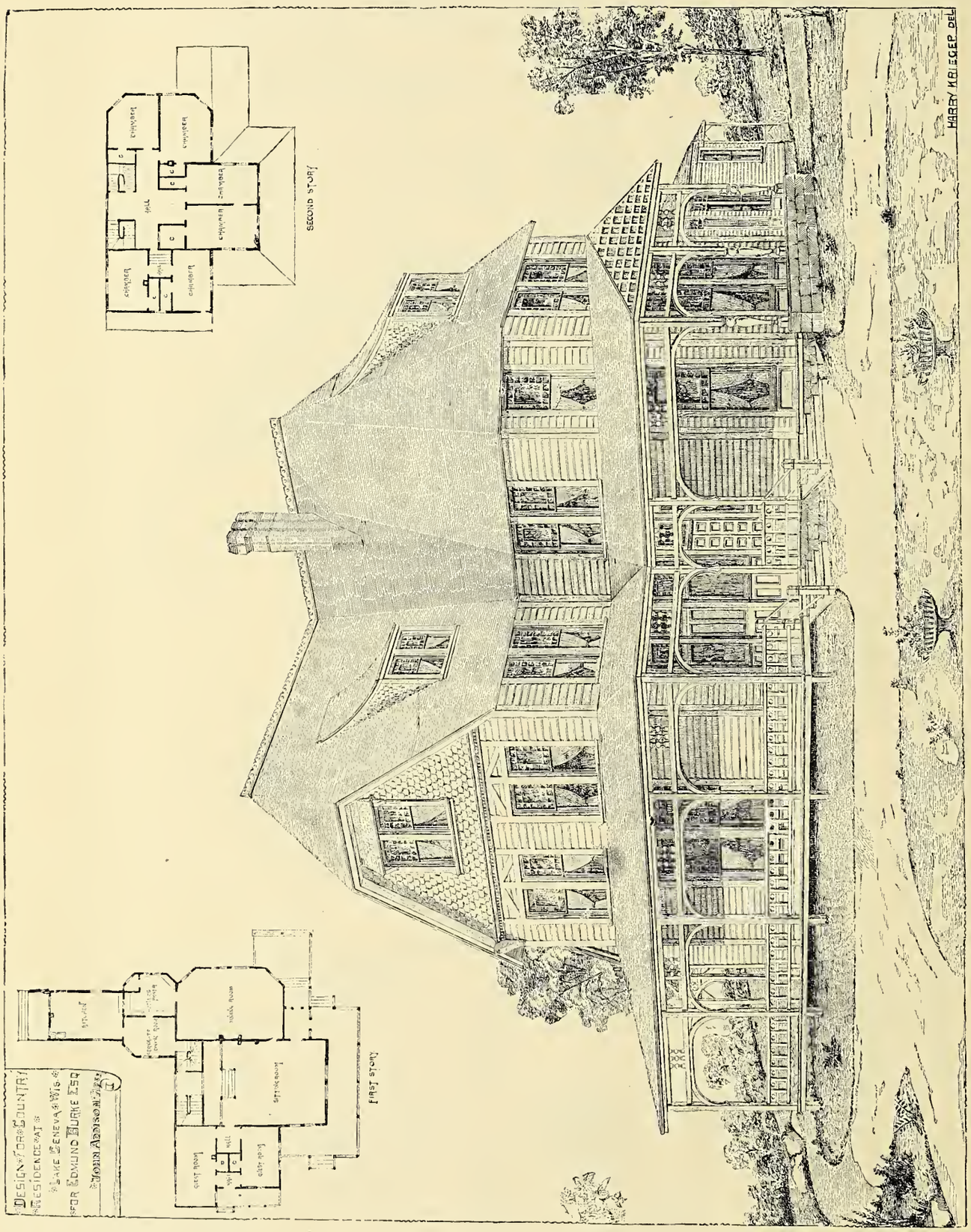


FRONT ELEVATION

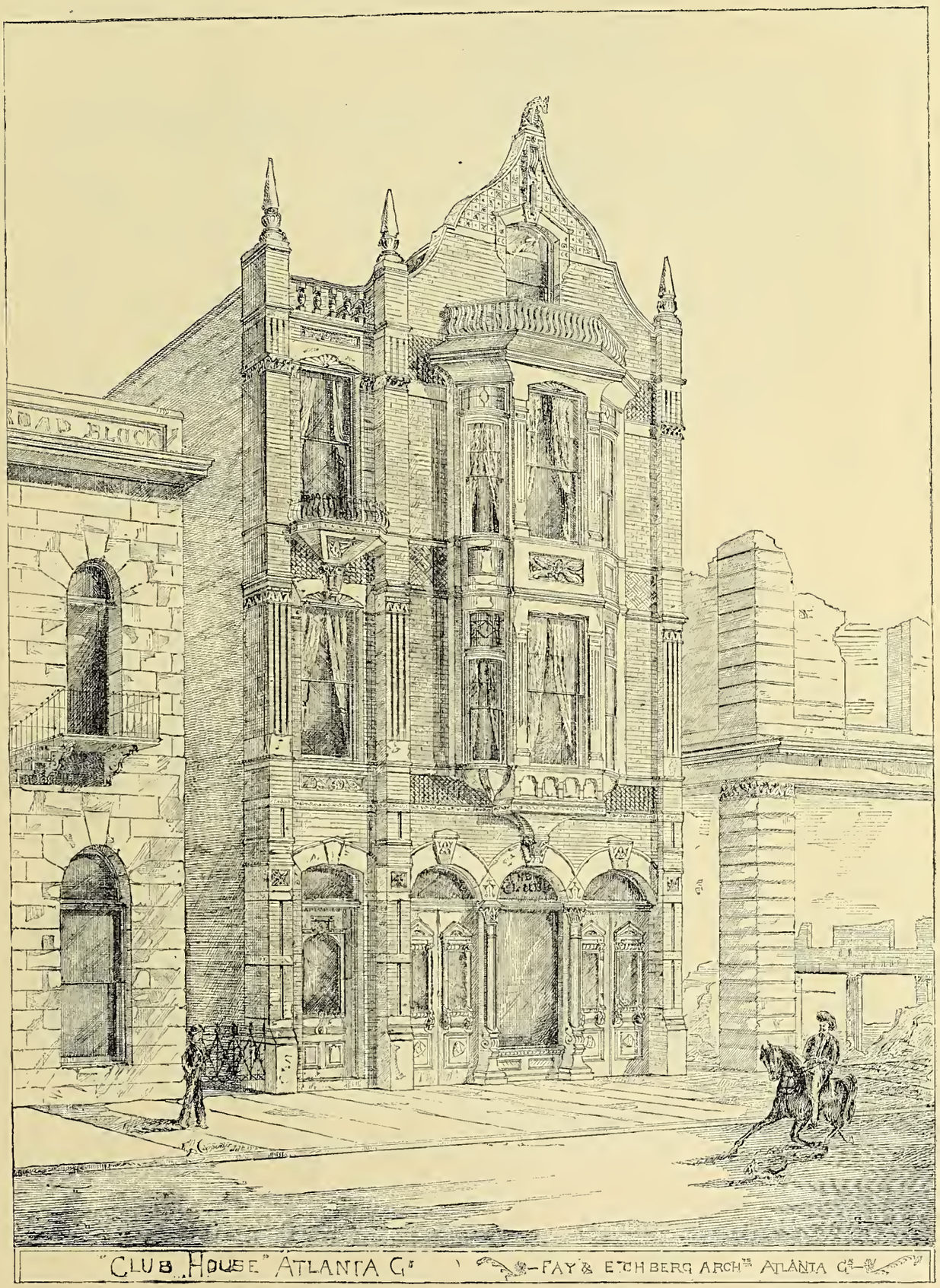


SECOND FLOOR PLAN

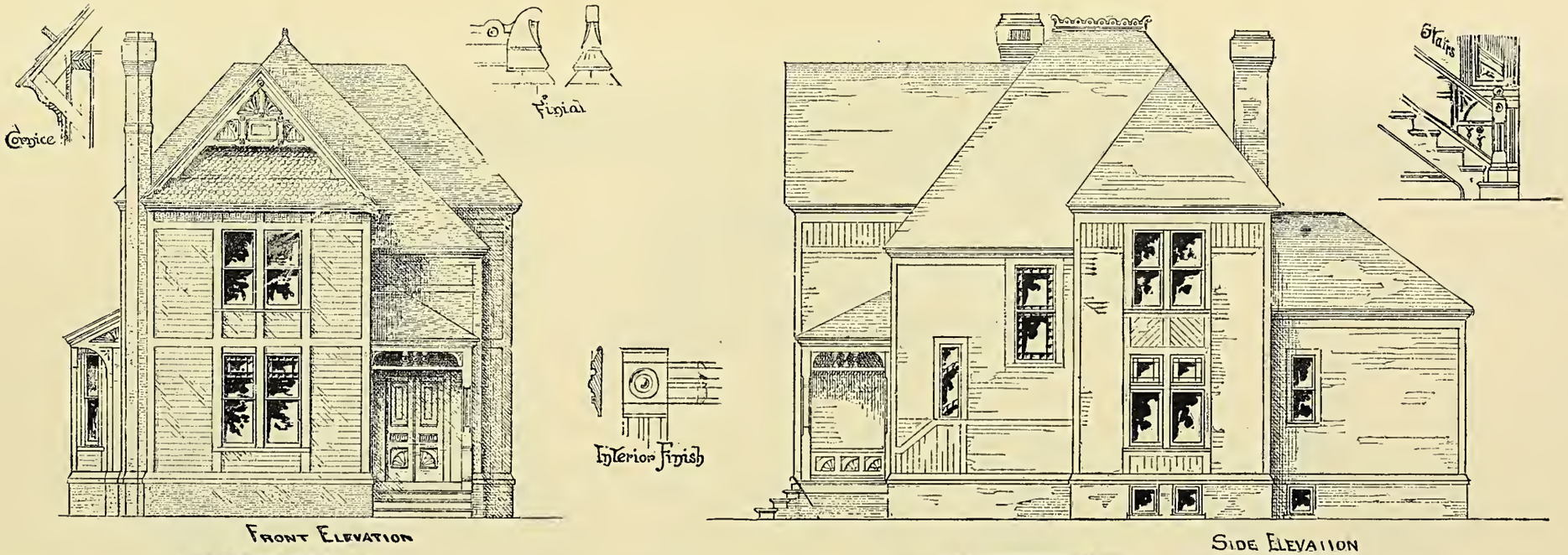
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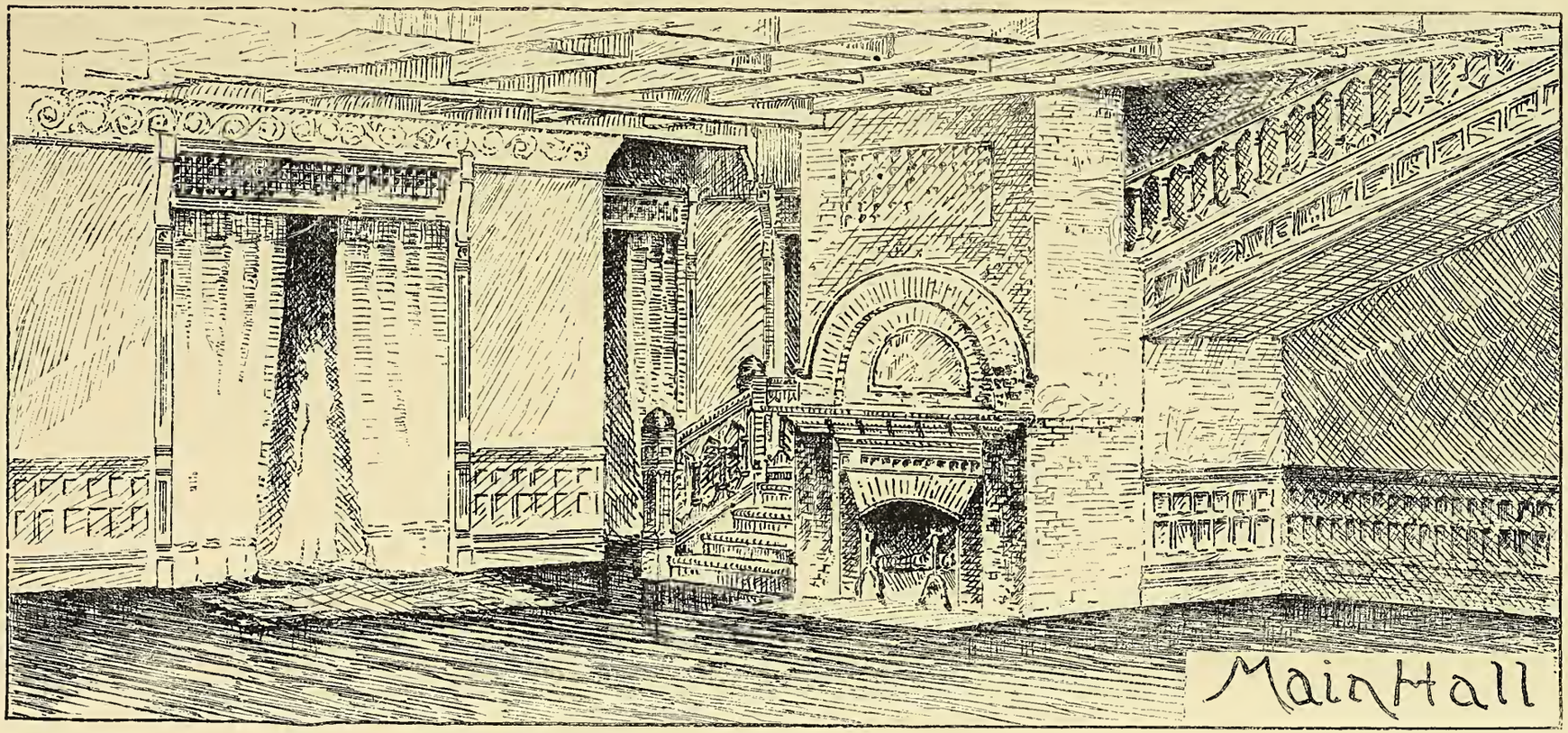


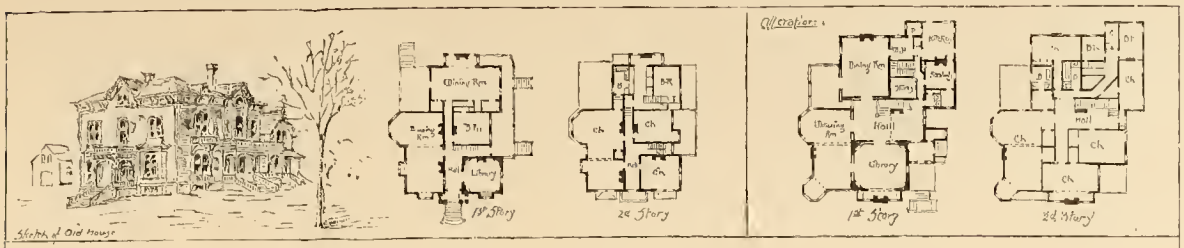
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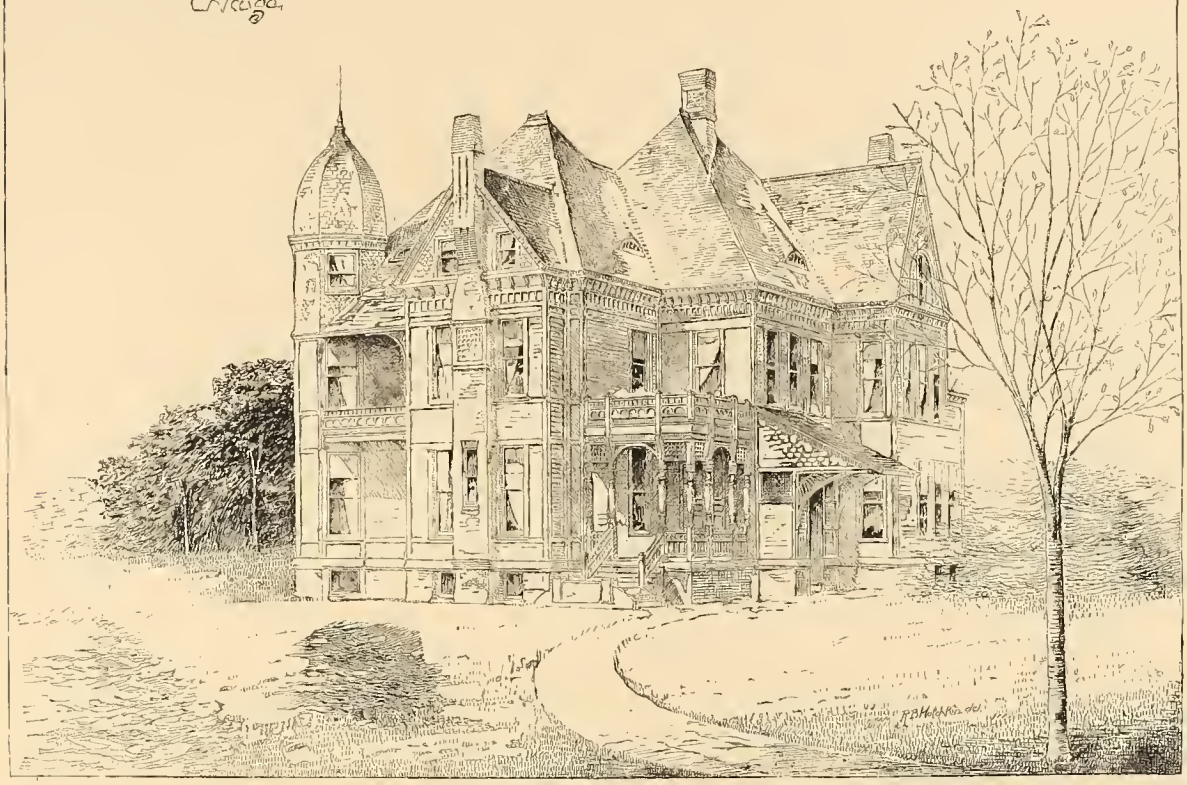

Dining Rm
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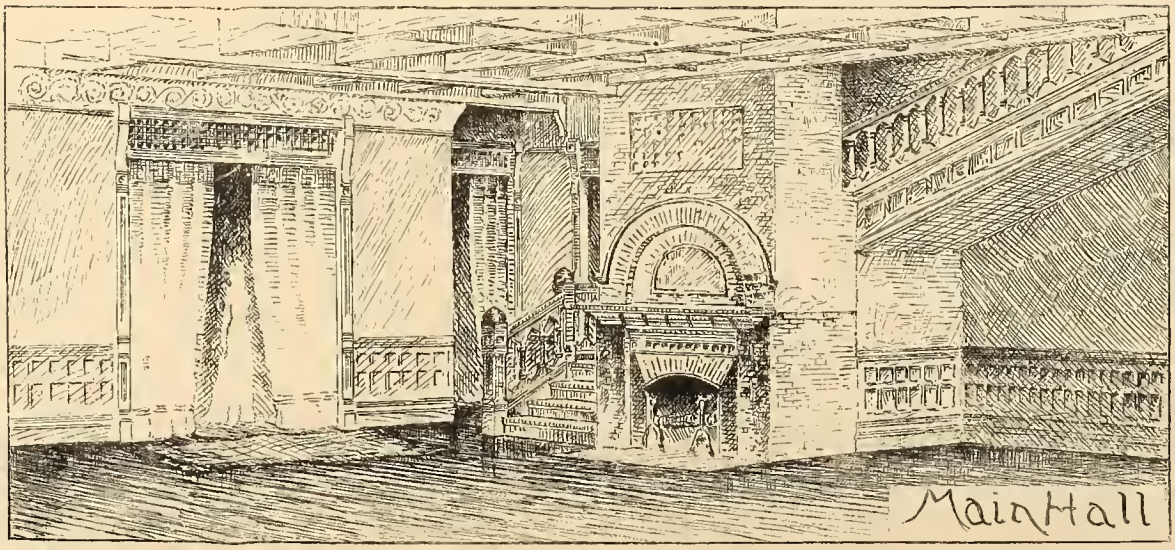

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